

**FEDERALLY ENFORCEABLE STATE
OPERATING PERMIT (FESOP)
and NEW SOURCE REVIEW
OFFICE OF AIR MANAGEMENT**

**Globe Building Materials, Inc.
2207 Schrage Avenue
Whiting, Indiana 46394**

(herein known as the Permittee) is hereby authorized to operate subject to the conditions contained herein, the source described in Section A (Source Summary) of this permit.

This permit is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-8 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17.

Operation Permit No.: NSR/FESOP 089-12500-00012	
Issued by: Paul Dubenetzky, Branch Chief Office of Air Management	Issuance Date:

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SECTION A

SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Management (OAM). The information describing the source contained in conditions A.1 through A.3 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this permit pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

A.1 General Information [326 IAC 2-8-3(b)]

The Permittee owns and operates an asphalt saturated felt and laminated roofing manufacturing stationary source.

Authorized individual:	Al Polewski
Source Address:	2207 Schrage Avenue, Whiting, Indiana 46394
Mailing Address:	2207 Schrage Avenue, Whiting, Indiana 46394
Phone Number:	(219) 659-7420
SIC Code:	2952
County Source Location:	Lake
County Status:	Ozone - Severe nonattainment SO ₂ - An area bounded on the north by Lake Michigan, on the west by the Indiana-Illinois State line, on the south by U.S. 30 from the State line to the intersection of I-65 then following I-65 to the intersection of I-94 then following I-94 to the Lake-Porter County line, & on the east by the Lake-Porter County line is nonattainment and the remainder of Lake County is attainment.
	CO - Part of City of East Chicago (area bounded by Columbus Drive on the north, the Indiana Harbor Canal on the west, 148 th St. if extended, on the south and Euclid Ave. on the east is nonattainment.
	PM10 - Moderate Nonattainment
Source Status:	Federally Enforceable State Operating Permit (FESOP) Minor Source, Emission Offset Rules; Minor Source, Section 112 of the Clean Air Act

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-8-3(c)(3)]

This stationary source consists of the following emission units and pollution control devices:

- (a) Production line #1, which is currently used to produce asphalt roof shingles, consists of a saturator/coater #1 with a maximum capacity of 61.39 tons of roof shingles per hour. Particulate Matter (PM) emissions from this line are controlled by two Electrostatic Precipitators CE1 and CE2;
- (b) Modification to production line #2, which is currently used to produce asphalt roof rolls, consists of a saturator/coater #2. This line is capable of producing a maximum of 11.69

tons of asphalt roof rolls per hour. The modification will give this line a capability to alternately produce laminated shingles at a maximum rate of 47.28 tons per hour. Particulate Matter (PM) emissions from this line are controlled by two Electrostatic Precipitators CE1 and CE2.

- (c) Seven (7) Storage Tanks:
One (1) proposed new adhesive (Polymer Modified Asphalt) tank with a capacity of 500 gallons,
One (1) new heated laminate sealant storage tank with a capacity of 9,000 gallons,
One (1) existing heated south saturant storage tank with a capacity of 21,000 gallons,
One (1) existing heated roll saturant flux storage tank with a capacity of 21,000 gallons,
One (1) existing heated coating storage tank with a capacity of 40,000 gallons,
One (1) existing heated seal adhesive storage tank with a capacity of 15,000 gallons, and
One (1) existing north saturant storage tank with a capacity of 21,000 gallons.

These tanks are controlled by a 1.0 million British Thermal Units per hour (mmBtu/hr) regenerative thermal oxidizer (RTO), identified as CE9;

- (d) A limestone unloading, storage, heating and handling system, which has a maximum capacity of 60, 847 tons per year of talc and silica sand combined, and is controlled by three (3) baghouses, CE3, CE4, and CE5;
- (e) Talc and silica sand handling and recovery, which has a maximum capacity of 20,000 tons per year of talc and silica sand combined, and is controlled by two (2) dust collectors DC1 and DC2; and
- (f) One (1) natural gas-fired Kewanee boiler, ID5 with a heat input capacity of 10.46 mmBtu/hr.

A.3 Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-8-3(c)(3)(I)]

This stationary source also includes the following insignificant activities, as defined in 326 IAC 2-7-1(21):

- (a) Natural gas-fired combustion sources with heat input equal to or less than ten million (10,000,000) Btu per hour.
- (1) One (1) 7.5 mm Btu/hr liquid tube heater;
 - (2) One (1) 4.5 mm Btu/hr liquid tube heater;
 - (3) Two (2) 2.0 mm Btu/hr liquid tube heater;
 - (4) One (1) 0.75 mmBtu/hr thermal fluid heater;
 - (5) One (1) 3.4 mmBtu/hr boiler;
 - (6) One (1) 1.043 mmBtu/hr seal use mix heater/tube heater;
 - (7) Two (2) furnaces each with a heat input capacity of 0.1 mmBtu/hr;
 - (8) Two (2) furnaces each with a heat input capacity of 0.08 mmBtu/hr;
 - (9) Two (2) 0.075 mmBtu/hr furnace;
 - (10) One (1) 0.03 mmBtu/hr heater;
 - (11) One (1) 0.055 mmBtu/hr water heater;
 - (12) Two (2) makeup air heater each with a heat input capacity of 2.5 mmBtu/hr;
 - (13) One (1) RTO with a heat input capacity of 1.0 mmBtu/hr;
 - (14) One (1) 1.5 mmBtu/hr, on hot oil heater for the modification to production line #2; and
 - (15) Six (6) 1.0 mmBtu/hr tube heaters for the storage tanks.

- (b) Other activities or categories with emissions equal to or less than 3 pounds of VOC per hour or 15 pounds per day.

- (1) Printing operation

A.4 FESOP Applicability [326 IAC 2-8-2]

This stationary source, otherwise required to have a Part 70 permit as described in 326 IAC 2-7-2(a), has applied to the Indiana Department of Environmental Management (IDEM), Office of Air Management (OAM) for a Federally Enforceable State Operating Permit (FESOP).

A.5 Prior Permit Conditions

- (a) This permit shall be used as the primary document for determining compliance with applicable requirements established by previously issued permits.
- (b) If, after issuance of this permit, it is determined that the permit is in nonconformance with an applicable requirement that applied to the source on the date of permit issuance, including any term or condition from a previously issued construction or operation permit, IDEM, OAM, shall immediately take steps to reopen and revise this permit and issue a compliance order to the Permittee to ensure expeditious compliance with the applicable requirement until the permit is reissued.

SECTION B GENERAL CONDITIONS

B.1 Definitions [326 IAC 2-8-1]

Terms in this permit shall have the definition assigned to such terms in the referenced regulation. In the absence of definitions in the referenced regulation, the applicable definitions found in the statutes or regulations (IC 13-11, 326 IAC 1-2, and 326 IAC 2-7) shall prevail.

B.2 Permit Term [326 IAC 2-8-4(2)]

This permit is issued for a fixed term of five (5) years from the effective date, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3.

B.3 Enforceability [326 IAC 2-8-6]

Unless otherwise stated, all terms and conditions in this permit, including any provisions designed to limit the source's potential to emit, are enforceable by, the United States Environmental Protection Agency (U.S. EPA) and by citizens in accordance with the Clean Air Act.

B.4 Termination of Right to Operate [326 IAC 2-8-9] [326 IAC 2-8-3(h)]

The Permittee's right to operate this source terminates with the expiration of this permit unless a timely and complete renewal application is submitted at least nine (9) months prior to the date of expiration of the source's existing permit, consistent with 326 IAC 2-8-3(h) and 326 IAC 2-8-9.

B.5 Severability [326 IAC 2-8-4(4)]

The provisions of this permit are severable; a determination that any portion of this permit is invalid shall not affect the validity of the remainder of the permit.

B.6 Property Rights or Exclusive Privilege [326 IAC 2-8-4(5)(D)]

This permit does not convey any property rights of any sort, or any exclusive privilege.

B.7 Duty to Supplement and Provide Information [326 IAC 2-8-3(f)] [326 IAC 2-8-4(5)(E)]

- (a) The Permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such supplementary facts or corrected information to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Management
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

The submittal by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (b) The Permittee shall furnish to IDEM, OAM, within a reasonable time, any information that IDEM, OAM, may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The submittal by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (c) Upon request, the Permittee shall also furnish to IDEM, OAM, copies of records required to be kept by this permit. The Permittee may include a claim of confidentiality in accordance with 326 IAC 17. If requested by IDEM, OAM, or the U.S. EPA, to furnish copies of requested records directly to U. S. EPA, then the Permittee must furnish record directly to the U. S. EPA. The Permittee may assert a claim of confidentiality in accordance with 40 CFR 2, Subpart B.

B.8 Compliance Order Issuance [326 IAC 2-8-5(b)]

IDEM, OAM may issue a compliance order to this Permittee upon discovery that this permit is in nonconformance with an applicable requirement. The order may require immediate compliance or contain a schedule for expeditious compliance with the applicable requirement.

B.9 Compliance with Permit Conditions [326 IAC 2-8-4(5)(A)] [326 IAC 2-8-4(5)(B)]

(a) The Permittee must comply with all conditions of this permit. Noncompliance with any provisions of this permit, except those specifically designated as not federally enforceable, constitutes a violation of the Clean Air Act and is grounds for:

- (1) Enforcement action;
- (2) Permit termination, revocation and reissuance, or modification; and
- (3) Denial of a permit renewal application.

(b) It shall not be a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

B.10 Certification [326 IAC 2-8-3(d)] [326 IAC 2-8-4(3)(C)(i)] [326 IAC 2-8-5(1)]

(a) Where specifically designated by this permit or required by an applicable requirement, any application form, report, or compliance certification submitted shall contain certification by a authorized individual of truth, accuracy, and completeness. This certification, shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

(b) One (1) certification shall be included, on the attached Certification Form, with each submittal.

(c) An authorized individual is defined at 326 IAC 2-1.1-1(1).

B.11 Annual Compliance Certification [326 IAC 2-8-5(a)(1)]

(a) The Permittee shall annually submit a compliance certification report which addresses the status of the source's compliance with the terms and conditions contained in this permit, including emission limitations, standards, or work practices. The certification shall cover the time period from January 1 to December 31 of the previous year, and shall be submitted in letter form no later than April 15 of each year to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Management
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

(b) The annual compliance certification report required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAM, on or before the date it is due.

(c) The annual compliance certification report shall include the following:

- (1) The appropriate identification of each term or condition of this permit that is the basis of the certification;

- (2) The compliance status;
- (3) Whether compliance was continuous or intermittent;
- (4) The methods used for determining the compliance status of the source, currently and over the reporting period consistent with 326 IAC 2-8-4(3); and
- (5) Such other facts as specified in Sections D of this permit, IDEM, OAM, may require to determine the compliance status of the source.

The notification which shall be submitted by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

B.12 Preventive Maintenance Plan [326 IAC 1-6-3] [326 IAC 2-8-4(9)] [326 IAC 2-8-5(a)(1)]

- (a) If required by specific condition(s) in Section D of this permit, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMPs) within ninety (90) days after issuance of this permit, including the following information on each facility:

- (1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;
- (2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and
- (3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

If due to circumstances beyond its control, the PMPs cannot be prepared and maintained within the above time frame, the Permittee may extend the date an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Management
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

The PMP and the PMP extension notification do not require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (b) The Permittee shall implement the PMPs as necessary to ensure that failure to implement a PMP does not cause or contribute to a violation of any limitation on emissions or potential to emit.
- (c) A copy of the PMPs shall be submitted to IDEM, OAM, upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAM. IDEM, OAM, may require the Permittee to revise its PMPs whenever lack of proper maintenance causes or contributes to any violation. The PMP does not require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

B.13 Emergency Provisions [326 IAC 2-8-12]

- (a) An emergency, as defined in 326 IAC 2-7-1(12), is not an affirmative defense for an action brought for noncompliance with a federal or state health-based emission limitation, except as provided in 326 IAC 2-8-12.

- (b) An emergency, as defined in 326 IAC 2-7-1(12), constitutes an affirmative defense to an action brought for noncompliance with a health-based or technology-based emission limitation if the affirmative defense of an emergency is demonstrated through properly signed, contemporaneous operating logs or other relevant evidence that describe the following:

- (1) An emergency occurred and the Permittee can, to the extent possible, identify the causes of the emergency;
- (2) The permitted facility was at the time being properly operated;
- (3) During the period of an emergency, the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or other requirements in this permit;
- (4) For each emergency lasting one (1) hour or more, the Permittee notified IDEM, OAM, within four (4) daytime business hours after the beginning of the emergency, or after the emergency was discovered or reasonably should have been discovered;

Telephone Number: 1-800-451-6027 (ask for Office of Air Management, Compliance Section), or
Telephone Number: 317-233-5674 (ask for Compliance Section)
Facsimile Number: 317-233-5967

Failure to notify IDEM, OAM, by telephone or facsimile within four (4) daytime business hours after the beginning of the emergency, or after the emergency is discovered or reasonably should have been discovered, shall constitute a violation of 326 IAC 2-8 and any other applicable rules. [326 IAC 2-8-12(f)]

- (5) For each emergency lasting one (1) hour or more, the Permittee submitted the attached Emergency Occurrence Report Form or its equivalent, either by mail or facsimile, to:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Management
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

within two (2) working days of the time when emission limitations were exceeded due to the emergency.

The notice fulfills the requirement of 326 IAC 2-8-4(3)(C)(ii) and must contain the following:

- (A) A description of the emergency;
- (B) Any steps taken to mitigate the emissions; and
- (C) Corrective actions taken.

The notification which shall be submitted by the Permittee does not require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (6) The Permittee immediately took all reasonable steps to correct the emergency.

- (c) In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.
- (d) This emergency provision supersedes 326 IAC 1-6 (Malfunctions) for sources subject to this rule after the effective date of this rule. This permit condition is in addition to any emergency or upset provision contained in any applicable requirement.
- (e) IDEM, OAM, may require that the Preventive Maintenance Plans required under 326 IAC 2-8-3-(c)(6) be revised in response to an emergency.
- (f) Failure to notify IDEM, OAM, by telephone or facsimile of an emergency lasting more than one (1) hour in accordance with (b)(4) and (5) of this condition shall constitute a violation of 326 IAC 2-8 and any other applicable rules.
- (g) Operations may continue during an emergency only if the following conditions are met:
 - (1) If the emergency situation causes a deviation from a technology-based limit, the Permittee may continue to operate the affected emitting facilities during the emergency provided the Permittee immediately takes all reasonable steps to correct the emergency and minimize emissions.
 - (2) If an emergency situation causes a deviation from a health-based limit, the Permittee may not continue to operate the affected emissions facilities unless:
 - (A) The Permittee immediately takes all reasonable steps to correct the emergency situation and to minimize emissions; and
 - (B) Continued operation of the facilities is necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw materials of substantial economic value.

Any operation shall continue no longer than the minimum time required to prevent the situations identified in (g)(2)(B) of this condition.

B.14 Deviations from Permit Requirements and Conditions [326 IAC 2-8-5(4)(3)(C)(ii)]

- (a) Deviations from any permit requirements (for emergencies see Section B - Emergency Provision), the probable cause of such deviations, and any response steps or preventive measures taken shall be reported to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Management
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

using the attached Quarterly Deviation and Compliance Monitoring Report, or its equivalent. Deviations that are required to be reported by an applicable requirement shall be reported according to the schedule stated in the applicable requirement and do not need to be included in this report.

The notification by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (b) A deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit or a rule. It does not include:
 - (1) An excursion from compliance monitoring parameters as identified in Section D

of this permit unless tied to an applicable rule or limit; or

- (2) Failure to implement elements of the Preventive Maintenance Plan unless such failure has caused or contributed to a deviation.

A Permittee's failure to take the appropriate response step when an excursion of a compliance monitoring parameter has occurred is a deviation.

- (c) Emergencies shall be included in the Quarterly Deviation and Compliance Monitoring Report.

B.15 Permit Modification, Reopening, Revocation and Reissuance, or Termination

[326 IAC 2-8-4(5)(C)] [326 IAC 2-8-7(a)] [326 IAC 2-8-8]

- (a) This permit may be modified, reopened, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a FESOP modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any condition of this permit. [326 IAC 2-8-4(5)(C)] The notification by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (b) This permit shall be reopened and revised under any of the circumstances listed in IC 13-15-7-2 or if IDEM, OAM determines any of the following:
 - (1) That this permit contains a material mistake.
 - (2) That inaccurate statements were made in establishing the emissions standards or other terms or conditions.
 - (3) That this permit must be revised or revoked to assure compliance with an applicable requirement. [326 IAC 2-8-8(a)]
- (c) Proceedings by IDEM, OAM, to reopen and revise this permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of this permit for which cause to reopen exists. Such reopening and revision shall be made as expeditiously as practicable. [326 IAC 2-8-8(b)]
- (d) The reopening and revision of this permit, under 326 IAC 2-8-8(a), shall not be initiated before notice of such intent is provided to the Permittee by IDEM, OAM, at least thirty (30) days in advance of the date this permit is to be reopened, except that IDEM, OAM, may provide a shorter time period in the case of an emergency. [326 IAC 2-8-8(c)]

B.16 Permit Renewal [326 IAC 2-8-3(h)]

- (a) The application for renewal shall be submitted using the application form or forms prescribed by IDEM, OAM and shall include the information specified in 326 IAC 2-8-3. Such information shall be included in the application for each emission unit at this source, except those emission units included on the trivial or insignificant activities list contained in 326 IAC 2-7-1(21) and 326 IAC 2-7-1(40). The renewal application does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

Request for renewal shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Management
100 North Senate Avenue, P.O. Box 6015
Indianapolis, IN 46206-6015

- (b) Timely Submittal of Permit Renewal [326 IAC 2-8-3]

- (1) A timely renewal application is one that is:
 - (A) Submitted at least nine (9) months prior to the date of the expiration of this permit; and
 - (B) If the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAM, on or before the date it is due.
- (2) If IDEM, OAM upon receiving a timely and complete permit application, fails to issue or deny the permit renewal prior to the expiration date of this permit, this existing permit shall not expire and all terms and conditions shall continue in effect until the renewal permit has been issued or denied.
- (c) Right to Operate After Application for Renewal [326 IAC 2-8-9]
If the Permittee submits a timely and complete application for renewal of this permit, the source's failure to have a permit is not a violation of 326 IAC 2-8 until IDEM, takes final action on the renewal application, except that this protection shall cease to apply if, subsequent to the completeness determination, the Permittee fails to submit by the deadline specified in writing by IDEM, OAM, any additional information identified as needed to process the application.

B.17 Permit Amendment or Revision [326 IAC 2-8-10] [326 IAC 2-8-11.1]

- (a) Permit amendments and revisions are governed by the requirements of 326 IAC 2-8-10 or 326 IAC 2-8-11.1 whenever the Permittee seeks to amend or modify this permit.

- (b) Any application requesting an amendment or modification of this permit shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Management
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

Any such application should be certified by the "authorized individual" as defined by 326 IAC 2-1.1-1(1) only if a certification is required by the terms of the applicable rule.

- (c) The Permittee may implement the administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-8-10(b)(3)]

B.18 Operational Flexibility [326 IAC 2-8-15]

- (a) The Permittee may make any change or changes at this source that are described in 326 IAC 2-8-15(b) through (d), without prior permit revision, if each of the following conditions is met:

- (1) The changes are not modifications under any provision of Title I of the Clean Air Act;
- (2) Any approval required by 326 IAC 2-8-11.1 has been obtained;
- (3) The changes do not result in emissions which exceed the emissions allowable under this permit (whether expressed herein as a rate of emissions or in terms of total emissions);

- (4) The Permittee notifies the:

Indiana Department of Environmental Management
Permits Branch, Office of Air Management
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

and

United States Environmental Protection Agency, Region V
Air and Radiation Division, Regulation Development Branch - Indiana (AR-18J)
77 West Jackson Boulevard
Chicago, Illinois 60604-3590

in advance of the change by written notification at least ten (10) days in advance of the proposed change. The Permittee shall attach every such notice to the Permittee's copy of this permit; and

- (5) The Permittee maintains records on-site which document, on a rolling five (5) year basis, all such changes and emissions trading that are subject to 326 IAC 2-8-15(b) through (d) and makes such records available, upon reasonable request, to public review.

Such records shall consist of all information required to be submitted to IDEM, OAM in the notices specified in 326 IAC 2-8-15(b), (c)(1), and (d).

- (b) The Permittee may make Section 502(b)(10) of the Clean Air Act changes (this term is defined at 326 IAC 2-7-1(36)) without a permit revision, subject to the constraint of 326 IAC 2-8-15(a) and the following additional conditions:

- (1) A brief description of the change within the source;
- (2) The date on which the change will occur;
- (3) Any change in emissions; and
- (4) Any permit term or condition that is no longer applicable as a result of the change.

The notification which shall be submitted by the Permittee does not require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1.

- (c) Emission Trades [326 IAC 2-8-15(c)]
The Permittee may trade increases and decreases in emissions in the source, where the applicable SIP provides for such emission trades without requiring a permit revision, subject to the constraints of Section (a) of this condition and those in 326 IAC 2-8-15(c).
- (d) Alternative Operating Scenarios [326 IAC 2-8-15(d)]
The Permittee may make changes at the source within the range of alternative operating scenarios that are described in the terms and conditions of this permit in accordance with 326 IAC 2-8-4(7). No prior notification of IDEM, OAM or U.S. EPA is required.

B.19 Permit Revision Requirement [326 IAC 2-8-11.1]

A modification, construction, or reconstruction is governed by the applicable provisions of 326 IAC 2-8-11.1.

B.20 Inspection and Entry [326 IAC 2-8-5(a)(2)]

Upon presentation of proper identification cards, credentials, and other documents as may be required by law, and subject to the Permittee's right under all applicable laws and regulations to assert that the information collected by the agency is confidential and entitled to be treated as such, the Permittee shall allow IDEM, OAM, U.S. EPA, or an authorized representative to perform the following:

- (a) Enter upon the Permittee's premises where a FESOP source is located, or emissions related activity is conducted, or where records must be kept under the conditions of this permit;
- (b) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
- (c) Inspect, at reasonable times, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit;
- (d) Sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with this permit or applicable requirements; and
- (e) Utilize any photographic, recording, testing, monitoring, or other equipment for the purpose of assuring compliance with this permit or applicable requirements.
[326 IAC 2-8-5(a)(4)]

B.21 Transfer of Ownership or Operational Control [326 IAC 2-8-10]

- (a) The Permittee must comply with the requirements of 326 IAC 2-8-10 whenever the Permittee seeks to change the ownership or operational control of the source and no other change in the permit is necessary.
- (b) Any application requesting a change in the ownership or operational control of the source shall contain a written agreement containing a specific date for transfer of permit responsibility, coverage and liability between the current and new Permittee. The application shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Management
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

The application which shall be submitted by the Permittee does not require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request.
[326 IAC 2-8-11(b)(3)]

B.22 Annual Fee Payment [326 IAC 2-8-4(6)] [326 IAC 2-8-16]

- (a) The Permittee shall pay annual fees to IDEM, OAM, within thirty (30) calendar days of receipt of a billing. If the Permittee does not receive a bill from IDEM, OAM the applicable fee is due April 1 of each year.
- (b) Failure to pay may result in administrative enforcement action, or revocation of this permit.

- (c) The Permittee may call the following telephone numbers: 1-800-451-6027 or 317-233-0425 (ask for OAM, Technical Support and Modeling Section), to determine the appropriate permit fee.

B.23 Advanced Source Modification Approval [326 IAC 2-8-4(11)] [326 IAC 2-1.1-9]

- (a) The requirements to obtain a permit revision under 326 IAC 2-8-11.1 are satisfied by this permit for the proposed emission units, control equipment or insignificant activities in Sections A.2 and A.3.
- (b) Pursuant to 326 IAC 2-1.1-9 any permit authorizing construction may be revoked if failure to commence construction of the emission unit within eighteen (18) months from the date of issuance of the permit, or if during the construction of work is suspended for a continuous period of one (1) year or more.

SECTION C SOURCE OPERATION CONDITIONS

Entire Source

Emissions Limitations and Standards [326 IAC 2-8-4(1)]

C.1 Overall Source Limit [326 IAC 2-8]

The purpose of this permit is to limit this source's potential to emit to less than major source levels for the purpose of Section 502(a) of the Clean Air Act.

(a) Pursuant to 326 IAC 2-8:

- (1) The potential to emit volatile organic compounds (VOCs) from the entire source shall be limited to less than twenty-five (25) tons per twelve (12) consecutive month period. This limitation shall also satisfy the requirements of 326 IAC 2-3 (Emission Offset);
- (2) The potential to emit any regulated pollutant from the entire source, except volatile organic compounds (VOCs), shall be limited to less than one-hundred (100) tons per twelve (12) consecutive month period;
- (3) The potential to emit any individual hazardous air pollutant (HAP) from the entire source shall be limited to less than ten (10) tons per twelve (12) consecutive month period; and
- (4) The potential to emit any combination of HAPs from the entire source shall be limited to less than twenty-five (25) tons per twelve (12) consecutive month period.

(b) Pursuant to 326 IAC 2-3 (Emission Offset), emissions of particulate matter (PM) from the entire source shall be limited to less than one-hundred (100) tons per twelve (12) consecutive month period.

(c) This condition shall include all emission points at this source including those that are insignificant as defined in 326 IAC 2-7-1(21). The source shall be allowed to add insignificant activities not already listed in this permit, provided the source's potential to emit does not exceed the above specified limits.

(d) Section D of this permit contains independently enforceable provisions to satisfy this requirement.

C.2 Opacity Limitations [326 IAC 5-1-2]

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:

(a) Opacity shall not exceed an average of twenty percent (20%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.

(b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

C.3 Open Burning [326 IAC 4-1] [IC 13-17-9]

The Permittee shall not open burn any material except as provided in 326 IAC 4-1-3, 326 IAC 4-1-4 or 326 IAC 4-1-6. The previous sentence notwithstanding, the Permittee may open burn in accordance with an open burning approval issued by the Commissioner under 326 IAC 4-1-4.1. 326 IAC 4-1-3(a)(2)(A) and (B) are not federally enforceable.

C.4 Incineration [326 IAC 4-2] [326 IAC 9-1-2(3)]

The Permittee shall not operate an incinerator or incinerate any waste or refuse except as provided in 326 IAC 4-2 and in 326 IAC 9-1-2. 326 IAC 9-1-2 is not federally enforceable.

C.5 Fugitive Dust Emissions [326 IAC 6-4]

The Permittee shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4 (Fugitive Dust Emissions). 326 IAC 6-4-2(4) is not federally enforceable.

C.6 Operation of Equipment [326 IAC 2-8-5(a)(4)]

Except as otherwise provided in this permit, all air pollution control equipment listed in this permit and used to comply with an applicable requirement shall be operated at all times that the emission units vented to the control equipment are in operation.

C.7 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61.140]

- (a) Notification requirements apply to each owner or operator. If the combined amount of regulated asbestos containing material (RACM) to be stripped, removed or disturbed is at least 260 linear feet on pipes or 160 square feet on other facility components, or at least thirty-five (35) cubic feet on all facility components, then the notification requirements of 326 IAC 14-10-3 are mandatory. All demolition projects require notification whether or not asbestos is present.
- (b) The Permittee shall ensure that a written notification is sent on a form provided by the Commissioner at least ten (10) working days before asbestos stripping or removal work or before demolition begins, per 326 IAC 14-10-3, and shall update such notice as necessary, including, but not limited to the following:
 - (1) When the amount of affected asbestos containing material increases or decreases by at least twenty percent (20%); or
 - (2) If there is a change in the following:
 - (A) Asbestos removal or demolition start date;
 - (B) Removal or demolition contractor; or
 - (C) Waste disposal site.
- (c) The Permittee shall ensure that the notice is postmarked or delivered according to the guidelines set forth in 326 IAC 14-10-3(2).
- (d) The notice to be submitted shall include the information enumerated in 326 IAC 14-10-3(3).

All required notifications shall be submitted to:

Indiana Department of Environmental Management
Asbestos Section, Office of Air Management
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

The notifications do not require a certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (e) **Procedures for Asbestos Emission Control**
The Permittee shall comply with the applicable emission control procedures in 326 IAC 14-10-4 and 40 CFR 61.145(c). Per 326 IAC 14-10-4 emission control requirements are applicable for any removal or disturbance of RACM greater than three (3) linear feet on pipes or three (3) square feet on any other facility components or a total of at least 0.75 cubic feet on all facility components.
- (f) **Indiana Accredited Asbestos Inspector**
The Permittee shall comply with 326 IAC 14-10-1(a) that requires the owner or operator, prior to a renovation/demolition, to use an Indiana Accredited Asbestos Inspector to thoroughly inspect the affected portion of the facility for the presence of asbestos. The requirement that the inspector be accredited is federally enforceable.

Testing Requirements [326 IAC 2-8-4(3)]

C.8 Performance Testing [326 IAC 3-6]

- (a) All testing shall be performed according to the provisions of 326 IAC 3-6 (Source Sampling Procedures), except as provided elsewhere in this permit, utilizing any applicable procedures and analysis methods specified in 40 CFR 51, 40 CFR 60, 40 CFR 61, 40 CFR 63, 40 CFR 75, or other procedures approved by IDEM, OAM.

A test protocol, except as provided elsewhere in this permit, shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Management
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

no later than thirty-five (35) days prior to the intended test date. The protocol submitted by the Permittee does not require certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (b) The Permittee shall notify IDEM, OAM of the actual test date at least fourteen (14) days prior to the actual test date. The notification submitted by the Permittee does not require certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (c) Pursuant to 326 IAC 3-6-4(b), all test reports must be received by IDEM, OAM within forty-five (45) days after the completion of the testing. An extension may be granted by IDEM, OAM, if the source submits to IDEM, OAM, a reasonable written explanation within five (5) days prior to the end of the initial forty-five (45) day period.

Compliance Requirements [326 IAC 2-1.1-11]

C.9 Compliance Requirements [326 IAC 2-1.1-11]

The commissioner may require stack testing, monitoring, or reporting at any time to assure compliance with all applicable requirements. Any monitoring or testing shall be performed in accordance with 326 IAC 3 or other methods approved by the commissioner or the U. S. EPA.

Compliance Monitoring Requirements [326 IAC 2-8-4] [326 IAC 2-8-5(a)(1)]

C.10 Compliance Monitoring [326 IAC 2-8-4(3)] [326 IAC 2-8-5(a)(1)]

All monitoring and record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance. If required by Section D, the Permittee shall be responsible for installing any necessary equipment and initiating any required

monitoring related to that equipment. If due to circumstances beyond its control, that equipment cannot be installed and operated within ninety (90) days, the Permittee may extend the compliance schedule related to the equipment for an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Management
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

in writing, prior to the end of the initial ninety (90) day compliance schedule with full justification of the reasons for inability to meet this date.

The notification which shall be submitted by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

Compliance monitoring for new emission units or emission units added through a permit revision shall be implemented when operation begins.

C.11 Maintenance of Emission Monitoring Equipment [326 IAC 2-8-4(3)(A)(iii)]

- (a) In the event that a breakdown of the emission monitoring equipment occurs, a record shall be made of the times and reasons of the breakdown and efforts made to correct the problem. To the extent practicable, supplemental or intermittent monitoring of the parameter should be implemented at intervals no less frequent than required in Section D of this permit until such time as the monitoring equipment is back in operation. In the case of continuous monitoring, supplemental or intermittent monitoring of the parameter should be implemented at intervals no less than one (1) hour until such time as the continuous monitor is back in operation.
- (b) The Permittee shall install, calibrate, quality assure, maintain, and operate all necessary monitors and related equipment. In addition, prompt corrective action shall be initiated whenever indicated.

C.12 Monitoring Methods [326 IAC 3]

Any monitoring or testing performed required by Section D of this permit shall be performed according to the provisions of 326 IAC 3, 40 CFR 60, Appendix A, or other approved methods as specified in this permit.

Corrective Actions and Response Steps [326 IAC 2-8-4] [326 IAC 2-8-5(a)(1)]

C.13 Risk Management Plan [326 IAC 2-8-4] [40 CFR 68.215]

If a regulated substance, subject to 40 CFR 68, is present at a source in more than a threshold quantity, 40 CFR 68 is an applicable requirement and the Permittee shall submit:

- (a) A compliance schedule for meeting the requirements of 40 CFR 68 by the date provided in 40 CFR 68.10(a); or
- (b) As a part of the annual compliance certification submitted under 326 IAC 2-7-6(5), a certification statement that the source is in compliance with all the requirements of 40 CFR 68, including the registration and submission of a Risk Management Plan (RMP); and
- (c) A verification to IDEM, OAM, that a RMP or a revised plan was prepared and submitted as required by 40 CFR 68.

All documents submitted pursuant to this condition shall include the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

C.14 Compliance Monitoring Plan - Failure to Take Response Steps [326 IAC 2-8-4] [326 IAC 2-8-5]

- (a) The Permittee is required to implement a compliance monitoring plan to ensure that reasonable information is available to evaluate its continuous compliance with applicable requirements. The compliance monitoring plan can be either an entirely new document, consist in whole information contained in other documents, or consist of a combination of new information and information contained in other documents. If the compliance monitoring plan incorporates by reference information contained in other documents, the Permittee shall identify as part of the compliance monitoring plan the documents in which the information is found. The elements of the compliance monitoring plan are:
 - (1) This condition;
 - (2) The Compliance Determination Requirements in Section D of this permit;
 - (3) The Compliance Monitoring Requirements in Section D of this permit;
 - (4) The Record Keeping and Reporting Requirements in Section C (Monitoring Data Availability, General Record Keeping Requirements, and General Reporting Requirements) and in Section D of this permit; and
 - (5) A Compliance Response Plan (CRP) for each compliance monitoring condition of this permit. CRP's shall be submitted to IDEM, upon request and shall be subject to review and approval by IDEM, OAM. The CRP shall be prepared within ninety (90) days after issuance of this permit by the Permittee and maintained on site, and is comprised of:
 - (A) Reasonable response steps that may be implemented in the event that compliance related information indicates that a response step is needed pursuant to the requirements of Section D of this permit; and
 - (B) A time schedule for taking reasonable response steps including a schedule for devising additional response steps for situations that may not have been predicted.
- (b) For each compliance monitoring condition of this permit, reasonable response steps shall be taken when indicated by the provisions of that compliance monitoring condition. Failure to take reasonable response steps shall constitute a violation of the permit.
- (c) Upon investigation of a compliance monitoring excursion, the Permittee is excused from taking further response steps for any of the following reasons:
 - (1) A false reading occurs due to the malfunction of the monitoring equipment. This shall be an excuse from taking further response steps providing that prompt action was taken to correct the monitoring equipment.
 - (2) The Permittee has determined that the compliance monitoring parameters established in the permit conditions are technically inappropriate, has previously submitted a request for an administrative amendment to the permit, and such request has not been denied; or
 - (3) An automatic measurement was taken when the process was not operating; or
 - (4) The process has already returned or is returning to operating within "normal" parameters and no response steps are required.
- (d) Records shall be kept of all instances in which the compliance related information was

not met and of all response steps taken. In the event of an emergency, the provisions of 326 IAC 2-7-16 (Emergency Provisions) requiring prompt corrective action to mitigate emissions shall prevail.

- (e) All monitoring required in Section D shall be performed at all times the equipment is operating. If monitoring is required by Section D and the equipment is not operating, then the Permittee may record the fact that the equipment is not operating or perform the required monitoring.
- (f) If for reasons beyond its control, the Permittee fails to perform the monitoring and record keeping as required by Section D, then the reasons for this must be recorded.
 - (1) At its discretion, IDEM may excuse such failure providing adequate justification is documented and such failures do not exceed five percent of the operating time in any quarter.
 - (2) Temporary, unscheduled unavailability of qualified staff shall be considered a valid reason for failure to perform the monitoring or record keeping requirements in Section D.

**C.15 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-8-4]
[326 IAC 2-8-5]**

- (a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall take appropriate corrective actions. The Permittee shall submit a description of these corrective actions to IDEM, OAM, within thirty (30) days of receipt of the test results. The Permittee shall take appropriate action to minimize excess emissions from the affected facility while the corrective actions are being implemented.
- (b) A retest to demonstrate compliance shall be performed within one hundred twenty (120) days of receipt of the original test results. Should the Permittee demonstrate to IDEM, OAM that retesting in one-hundred and twenty (120) days is not practicable, IDEM, OAM may extend the retesting deadline.
- (c) IDEM, OAM reserves the authority to take any actions allowed under law in response to noncompliant stack tests.

The documents submitted pursuant to this condition do not require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)]

C.16 Emission Statement [326 IAC 2-6] [326 IAC 2-8-4(3)]

- (a) The Permittee shall submit an annual emission statement certified pursuant to the requirements of 326 IAC 2-6. This annual statement must be received by April 15 of each year and must comply with the minimum requirements specified in 326 IAC 2-6-4. The submittal should cover the period defined in 326 IAC 2-6-2(8) (Emission Statement Operating Year). The annual statement must be submitted to:

Indiana Department of Environmental Management
Technical Support and Modeling Section, Office of Air Management
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

The emission statement does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (b) The annual emission statement required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAM, on or before the date it is due.

C.17 General Record Keeping Requirements [326 IAC 2-8-4(3)] [326 IAC 2-8-5]

- (a) Records of all required monitoring data and support information shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be kept at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.
- (b) Records of required monitoring information shall include, where applicable:
 - (1) The date, place, and time of sampling or measurements;
 - (2) The dates analyses were performed;
 - (3) The company or entity performing the analyses;
 - (4) The analytic techniques or methods used;
 - (5) The results of such analyses; and
 - (6) The operating conditions existing at the time of sampling or measurement.
- (c) Support information shall include, where applicable:
 - (1) Copies of all reports required by this permit;
 - (2) All original strip chart recordings for continuous monitoring instrumentation;
 - (3) All calibration and maintenance records;
 - (4) Records of preventive maintenance.
- (d) All record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance.

C.18 General Reporting Requirements [326 IAC 2-8-4(3)(C)] [326 IAC 2-1.1-11]

- (a) The source shall submit the attached Quarterly Deviation and Compliance Monitoring Report or its equivalent. Any deviation from permit requirements, the date(s) of each deviation, the cause of the deviation, and the response steps taken must be reported. This report shall be submitted within thirty (30) days of the end of the reporting period.

The Quarterly Deviation and Compliance Monitoring Report shall include the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (b) The report required in (a) of this condition and reports required by conditions in Section D of this permit shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Management
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

- (c) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAM, on or before the date it is due.
- (d) Unless otherwise specified in this permit, any quarterly report shall be submitted within thirty (30) days of the end of the reporting period. The reports do require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (e) The first report shall cover the period commencing on the date of issuance of this permit and ending on the last day of the reporting period. Reporting periods are based on calendar years.

Stratospheric Ozone Protection

C.19 Compliance with 40 CFR 82 and 326 IAC 22-1

Pursuant to 40 CFR 82 (Protection of Stratospheric Ozone), Subpart F, except as provided for motor vehicle air conditioners in Subpart B, the Permittee shall comply with the standards for recycling and emissions reduction:

- (a) Persons opening appliances for maintenance, service, repair or disposal must comply with the required practices pursuant to 40 CFR 82.156
- (b) Equipment used during the maintenance, service, repair or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to 40 CFR 82.158.
- (c) Persons performing maintenance, service, repair or disposal of appliances must be certified by an approved technician certification program pursuant to 40 CFR 82.161.

SECTION D.1

FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-8-4(10)]:

- (a) Production line #1, which is currently used to produce asphalt roof shingles, consists of a saturator/coater #1 with a maximum capacity of 61.39 tons of roof shingles per hour. Particulate Matter (PM) emissions from this line are controlled by two Electrostatic Precipitators CE1 and CE2;
- (b) Modification to production line #2, which is currently used to produce asphalt roof rolls, consists of a saturator/coater #2. This line is capable of producing a maximum of 11.69 tons of asphalt roof rolls per hour. The modification will give this line a capability to alternately produce laminated shingles at a maximum rate of 47.28 tons per hour. Particulate Matter (PM) emissions from this line are controlled by two Electrostatic Precipitators CE1 and CE2.
- (c) Seven (7) Storage Tanks:
One (1) proposed new adhesive (Polymer Modified Asphalt) tank with a capacity of 500 gallons,
One (1) new heated laminate sealant storage tank with a capacity of 9,000 gallons,
One (1) existing heated south saturant storage tank with a capacity of 21,000 gallons,
One (1) existing heated roll saturant flux storage tank with a capacity of 21,000 gallons, One (1) existing heated coating storage tank with a capacity of 40,000 gallons,
One (1) existing heated seal adhesive storage tank with a capacity of 15,000 gallons, and
One (1) existing north saturant storage tank with a capacity of 21,000 gallons.

These tanks are controlled by a 1.0 million British Thermal Units per hour (mmBtu/hr) regenerative thermal oxidizer (RTO), identified as CE9;
- (d) A limestone unloading, storage, heating and handling system which has a maximum capacity of 60, 847 tons per year, and is controlled by three (3) baghouses, CE3, CE4, and CE5; and
- (e) Talc and silica sand handling and recovery, which has a maximum capacity of 20,000 tons per year of talc and silica sand combined, and is controlled by two (2) dust collectors DC1 and DC2.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emissions Limitations and Standards [326 IAC 2-8-4(1)]

D.1.1 Volatile Organic Compound [326 IAC 2-7, and 326 IAC 2-3]

Asphalt saturator/coater 1 and saturator/coater 2 shall be limited to a total of 453,000 tons of asphalt shingles and rolls per twelve (12) month period, rolled on a monthly basis, and using emission factor of 0.098 pound of VOC per ton of roof rolls or shingles produced. This production limitation will restrict the volatile organic compounds (VOC) emissions to less than 22.2 tons per twelve month period. Compliance with this limit will make 326 IAC 2-7 (Part 70), and 326 IAC 2-3 (Emission Offset) not applicable.

D.1.2 Particulate Matter Less Than Ten (10) Microns (PM10) [326 IAC 6-1-10.1]

Pursuant to 326 IAC 6-1-10.1, the PM10 emissions from the asphalt saturator 1 and saturator 2 shall be limited 0.06 pounds per ton (lb/ton) of product and 4.5 pounds per hour (lb/hr). Compliance with this limit will make 326 IAC 2-7 (Part 70), and 326 IAC 2-3 (Emission Offset) not applicable.

D.1.3 Particulate Matter [326 IAC 6-1-2]

Pursuant to 326 IAC 6-1-2, the PM emissions from the following facilities shall be limited as

follows:

Facility	PM Emission Limit (gr/dscf)	Air Flow Rate (dry standard cubic feet/minute)	PM Emission Limit (lbs/hr)
Saturator/coater 1	0.03 gr/dscf	15,000	3.85
Saturator/coater 2	0.08 lb/ton when asphalt shingle or mineral-surfaced roll is produced.		
	0.03 gr/dscf	15,000	3.85
Limestone Handling	0.03 gr/dscf	3,500	0.9
Talc and Silica Sand Handling	0.03 gr/dscf	1,500	0.38

D.1.4 New Source Performance Standards (NSPS), § 60.470, Subpart UU - Standards of Performance for Asphalt Roofing Manufacturer [40 CFR § 60.470] [326 IAC 12]

Pursuant to this NSPS that within 60 days after achieving the maximum production rate at which the affected facility will be operated, but not later than 180 days after initial start, the following limits shall apply:

- (a) The modified saturator 2 is limited to 0.04 kilogram (kg) of particulate matter per megagram (MG) of asphalt shingle or mineral-surfaced roll roofing produced (0.08 lb/ton); or 0.4 kg/Mg (0.8 lb/ton) of saturated felt or smooth-surfaced roll roofing.
note: 1 Mg = 2,204 lbs 1 kg = 2.204 lbs
- (b) Talc and silica sand screw conveyor system, and storage facility, shall have an opacity not greater than one (1%) percent.
- (c) Adhesive (Polymer Modified Asphalt) tank and the new heated laminate sealant storage tank shall have an opacity limit not greater than zero (0%) percent, except for one consecutive 15-minute period in any 24-hour period when the transfer lines are being blown for clearing. The control device shall not be by-passed during this 15-minute period.

D.1.5 Fugitive Particulate Matter [326 IAC 6-1-11.1]

Pursuant to 326 IAC 6-1-11.1, the following facilities fugitive particulate matter emissions shall be limited as follows:

- (a) Paved roads and parking lots - The average instantaneous opacity of fugitive particulate matter emissions from a paved road shall not exceed ten percent (10%).
- (b) Unpaved roads and parking lots - The average instantaneous opacity of fugitive particulate matter emissions from an unpaved road shall not exceed ten percent (10%).
- (c) Material transfer -
 - (A) The average instantaneous opacity of fugitive particulate emissions from batch transfer shall not exceed ten percent (10%), and

- (B) Where adequate wetting of the material for fugitive particulate matter emissions control is prohibitive to further processing or reuse of the material, the opacity shall not exceed ten percent (10%) three (3) minute average.

- (d) Continuous transfer of material onto and out of storage piles - shall not exceed ten (10%) on a three (3) minute average.

The opacity shall be determined using 40 CFR 60, Appendix A, Method 9.

- (e) Wind erosion from storage piles and exposed areas - The opacity of fugitive particulate matter emissions from storage piles shall not exceed ten percent (10%) on a six (6) minute average. These limitations may not apply during periods when application of fugitive particulate control measures are either ineffective or unreasonable due to sustained very high wind speed. During such period, the company must continue to implement all reasonable fugitive particulate control measures and maintain records documenting the application of measures and the basis for a claim that meeting the opacity limitation was not reasonable given prevailing wind condition.

The opacity of fugitive particulate emissions from exposed areas shall not exceed ten percent (10%) on a six (6) minute average.

The opacity shall be determined using 40 CFR 60, Appendix A, Method 9.

- (f) Material transportation activities -

- (A) There shall be a zero (0) percent frequency of visible emissions observations of material during the inplant transportation of material by truck or rail at any time. Compliance with this limitation shall be determined by 40 CFR 60, Appendix A, Method 22.
- (B) The opacity of fugitive particulate emissions from the inplant transportation of material by front end loaders and skip hoists shall not exceed ten percent (10%).

- (g) Material processing facilities -

- (A) The PM10 stack emissions from a material processing facility shall not exceed twenty-two thousandths (0.022) grains per dry standard cubic foot and ten percent (10%) opacity.

Compliance with the opacity limitation shall be determined by 40 CFR 60, Appendix A, Method 9.

- (B) The opacity of fugitive particulate emissions from a material processing facility except crusher at which a capture system is not used, shall not exceed ten percent (10%).

Compliance with the opacity limitation shall be determined by 40 CFR 60, Appendix A, Method 9.

- (C) The opacity of fugitive particulate emissions from a crusher at which a capture system is not used shall not exceed fifteen percent (15%).

Compliance with the opacity limitation shall be determined by 40 CFR 60, Appendix A, Method 9.

- (D) There shall be a zero percent (0%) frequency of visible emission observation from a building enclosing all or a part of the material processing equipment,

except from a vent in the building.

Compliance with the opacity limitation shall be determined by 40 CFR 60, Appendix A, Method 22.

- (E) The PM10 emissions from building vents shall not exceed twenty-two thousandths (0.022) grains per dry standard cubic foot and ten percent (10%) opacity.

Compliance with the opacity limitation shall be determined by 40 CFR 60, Appendix A, Method 9.

- (h) Dust handling equipment - The opacity of particulate emissions from dust handling equipment shall not exceed ten percent (10%).

Compliance with the opacity limitation shall be determined by 40 CFR 60, Appendix A, Method 9.

- (i) Any facility or operation not specified in this subsection, 326 IAC 6-1-11.1 shall meet a twenty percent (20%), three (3) minute average opacity standard.

D.1.6 Preventive Maintenance Plan [326 IAC 2-8-4(9)]

A Preventive Maintenance Plan, in accordance with Condition B.13 of this permit is required for these facilities.

Compliance Determination Requirements

D.1.7 Particulate Matter Contingency Measures [326 IAC 6-1-11.2]

The source is subject to the contingency measures specified in rule 326 IAC 6-1-11.2.

D.1.8 Fugitive Opacity Reading [326 IAC 6-1-11.1]

Pursuant to 326 IAC 6-1-11.1 (Fugitive Particulate Matter Control Requirements)

The opacity limits from the following operations/activities found in Condition D.1.5 shall be achieved by controlling fugitive particulate matter emissions according to the source's Fugitive Dust Plan, submitted on September 22, 2000. If it is determined that the control procedures specified in the Fugitive Dust Plan do not demonstrate compliance with the fugitive emission limitations, IDEM, OAM may request that the plan be revised and submitted for approval.

Opacity from the activities shall be determined as follows:

- (a) Paved roads and parking lots - the average instantaneous opacity shall be average of twelve (12) instantaneous opacity readings, taken for four (4) vehicle passes, consisting of three (3) opacity readings for each vehicle pass. The three (3) opacity readings for each vehicle pass shall be taken as follows:
- (1) The first shall be taken at the time of emission generation.
 - (2) The second shall be taken five (5) seconds later.
 - (3) The third shall be taken five (5) seconds later or ten (10) seconds after the first.
- (b) Unpaved roads and parking lots - Average instantaneous opacity shall be determined according to procedure described in subdivision (a). The fugitive particulate emissions from unpaved roads shall be controlled by the implementation of a work program and work practice under the control plan.

- (c) Material transfer - The average instantaneous opacity shall consist of the average of three (3) opacity readings taken five (5) seconds, ten (10) seconds, and fifteen (15) seconds, after the end of one (1) batch loading or unloading operation. The three (3) readings shall be taken at the point of maximum opacity. The observer shall stand approximately fifteen (15) feet from the plume and at approximately right angles to the plume.
- (d) Continuous transfer of material onto and out of storage piles - The opacity shall be determined using 40 CFR 60, Appendix A, Method 9.
- (e) Wind erosion from storage piles and exposed areas - The opacity shall be determined using 40 CFR 60, Appendix A, Method 9, except that the opacity shall be observed at approximately four (4) feet from the surface at the point of maximum opacity. The observer shall stand approximately fifteen (15) feet from the plume and at approximately right angles to the plume. The limitation may not apply during periods when application of fugitive particulate control measures are either ineffective or unreasonable due to sustained very high wind speed. During such periods the company must continue to implement all reasonable fugitive particulate control measures and maintain records documenting the application of measures and the basis for a claim that meeting the opacity limitation was not reasonable given prevailing wind conditions.
- (f) Material transportation activities:
 - (1) Material transported by truck or rail - Compliance with this limitation shall be determined by 40 CFR 60, Appendix A, Method 22, except that the observation shall be taken at approximately right angles to the prevailing wind from the leeward side of the truck or railroad car. Material transported by truck or rail that is enclosed and covered shall be considered in compliance with the inplant transportation requirements.
 - (2) Material Transported by Front End Loader or Skip Hoist - Compliance with the limitation shall be determined by the average of three (3) opacity readings taken at five (5) second intervals. The three (3) opacity readings shall be taken as follows:
 - (a) The first shall be taken at the time of emission generation.
 - (b) The second shall be taken five (5) seconds later.
 - (c) The third shall be taken five (5) seconds later or ten (10) seconds after the first.
- (g) Material processing facilities - Compliance with the opacity limitation shall be determined by 40 CFR 60, Appendix A, Method 9.
 - (1) The opacity of fugitive particulate emissions from a material processing facility except crusher at which a capture system is not used - Compliance with the opacity limitation shall be determined by 40 CFR 60, Appendix A, Method 9.
 - (2) Building enclosing all or a part of the material processing equipment, except from a vent in the building - Compliance with the opacity limitation shall be determined by 40 CFR 60, Appendix A, Method 22.
 - (3) Building vents - Compliance with the concentration standard shall be determined by 40 CFR 60, Appendix A, Method 5 or 17 and with the opacity standard by 40 CFR 60, Appendix A, Method 9.

- (h) Dust handling equipment - Compliance with the opacity limitation shall be determined by 40 CFR 60, Appendix A, Method 9.
- (i) For any facility or operation not specified in this subsection - Compliance with the opacity limitation shall be determined by 40 CFR 60, Appendix A, Method 9.

D.1.9 Compliance Stack Test [40CFR Part 60.470] [326 IAC 12]

- (a) Compliance stack tests shall be performed for PM, and PM10 from the saturator/coater 1 and saturator/coater 2 Electrostatic Precipitator (ESP), identified as CE1 and CE2, to verify compliance with Conditions D.1.2, D.1.3, and D.1.4. During these tests the temperature of the gas at the inlet of the ESPs, CE1 and CE2 shall be established that coincides with the limits in Conditions D.1.2, D.1.3, and D.1.4.

When the product being produced in saturator/coater 2 is not the product subject to the NSPS (40CFR Part 60.470, Subpart UU), the tests shall be conducted within 60 days after achieving maximum production rate on the modification, but no later than 180 days after initial start-up,

- (b) For saturator 2, which is subject to 40 CFR Part 60.470, Subpart UU (NSPS), the owner or operator shall conduct performance tests as mentioned in § 60.8 and § 60.474 as follows:
 - (1) If the final product is shingle or mineral-surfaced roll roofing, the tests shall be conducted while 106.6 kilogram (kg) (235 lb) shingle is being produced.
 - (2) If the final product is saturated felt or smooth-surfaced roll roofing, the tests shall be conducted while 6.8 kg (15 lb) felt is being produced.
 - (3) If the final product is fiberglass shingle, the tests shall be conducted while a nominal 100 kg (220 lb) shingle is being produced.
 - (4) The tests shall be conducted within 60 days, but no later than 180 days after initial start-up on any of the products that are subject to the NSPS.
- (c) The compliance tests in section (a) and (b) of this condition shall be according to the provisions of 326 IAC 3-6 (Source Sampling Procedure) using the methods specified in the rule or as approved by the Commissioner. The Office of Air Management (OAM) and Northwest Indiana Office shall be notified of the actual test date at least two (2) weeks prior to the date, a test protocol shall be submitted to the OAM, Compliance Data Section and the Northwest Indiana Office, 35 days in advance of the test, and all test reports must be received by the OAM and the Northwest Indiana Office within 45 days of completion of the testing, pursuant to that rule.
- (d) The compliance stack tests shall be performed once every five (5) years.

D.1.10 Saturator/Coater 2 NSPS Requirement [40CFR Part 60.470] [326 IAC 12]

The owner or operator shall determine compliance with the particulate matter standards found in 40 CFR § 60.472, Subpart UU for saturator 2 as follows:

- (a) The emission rate (E) of particulate matter shall be computed for each run using the following equation:

$$E = (C_s Q_{sd}) / (PK)$$

Where:

E = emission rate of particulate matter, kg/Mg

C_s = concentration of particulate matter, g/dscm (g/dscf)

Q_{sd} = volumetric flow rate of effluent gas, dscm/hr (dscf/hr)
 P = asphalt roofing production rate or asphalt charging rate, Mg/hr (ton/hr)
 K = conversion factor, 1000g/kg [907.2/(g-Mg)/(kg-ton)]

Compliance Monitoring Requirements [326 IAC 2-8-5(a)(1)]

D.1.11 Electrostatic Precipitators (ESPs)

The two (2) electrostatic precipitators (ESPs) CE1 and CE2 shall be operated at all times when the two (2) saturators/coaters 1 and 2 are in operation.

- (a) The ability of the ESPs to control particulate emissions shall be monitored once per shift, when the saturators/coaters are in operation, by measuring and recording the number of T-R sets (transformer-rectifier sets) in service.
- (b) Appropriate response steps shall be taken in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps whenever the percentage of T-R sets in service falls below 90 percent*. In the event of the T-R failure resulting in less than 90 percent* availability, so that T-R sets can be repaired or the cause leading to T-R sets outages can be corrected.
- (c) Available T-R sets shall be operated at voltage and current levels consistent with the ESPs manufacturer's specification.
- (d) The instrument used for determining the T-R set voltage shall be subject to approval by IDEM, OAM, and shall be calibrated at least once every six (6) months.
- (e) The owner or operator shall continuously monitor and record the temperature of the gas at the inlet of the ESPs, CE1 and CE2. The temperature monitoring instrument shall have an accuracy of $\pm 15^{\circ}\text{C}$ over its range.

*(Other values may be used if it can be demonstrated that a lesser number of T-R sets is needed to maintain compliance, but T-R set availability should, in no case, fall below 75 percent. Response Steps planned to restore T-R sets to service are to be included in the Preventive Maintenance Plan.)

D.1.12 Visible Emission Notations

- (a) Visible emission notations of the saturators/coaters Electrostatic Precipitators stack exhausts CE1 and CE2, limestone unloading, storage heating and handling stack exhausts CE3, CE4, CE5, talc and silica sand handling stack exhausts DC1, DC2, shall be performed once per shift during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed.

D.1.13 Baghouse Inspections

An inspection shall be performed each calendar quarter of all bags controlling the limestone handling and talc and silica sand handling operations when venting to the atmosphere. A baghouse inspection shall be performed within three months of redirecting vents to the atmosphere and every three months thereafter. Inspections are optional when venting indoors.

All defective bags shall be replaced.

D.1.14 Broken or Failed Bag Detection

In the event that bag failure has been observed:

- (a) The affected compartments will be shut down immediately until the failed units have been repaired or replaced. Within eight (8) hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) hours of discovery of the failure and shall include a timetable for completion. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).
- (b) For single compartment baghouses, failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

D.1.15 Oxidizer [326 IAC 2-1.1-11]

Pursuant to 326 IAC 2-1.1-11, the 1.0 mmBtu per hour natural gas-fired oxidizer shall maintain a minimum operating temperature of 1,400 °F or the temperature determined during a stack test to minimize the odor problem coming from the asphalt storage tanks. This stack test will be required once if and when a complaint regarding odor has been received by IDEM or NWRO.

Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)]

D.1.16 Record Keeping Requirements

To document compliance with Conditions D.1.1 and D.1.2, the Permittee shall maintain the following records in accordance below:

- (a) the asphalt rolls or shingles produced by the two (2) saturators/coaters, 1 and 2.

To document compliance with Condition D.1.12, the Permittee shall maintain records of visible emission notations of the stack exhausts daily.

To document compliance with Condition D.1.10, the Permittee shall maintain records of the computed PM emission rates for each test run.

(All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

The Permittee shall retain records of all recording/monitoring data and support information for a period of five (5) years, or longer if specified elsewhere in this permit, from the date of the monitoring sample, measurement, or report. Support information includes all calibration and maintenance records and copies of all reports required by this permit.

D.1.17 Reporting Requirements

A quarterly summary to document compliance with operation condition number D.1.1 shall be submitted, using the enclosed forms or their equivalent, within thirty (30) days after the end of the quarter being reported.

SECTION D.2 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-8-4(10):

(f) One natural gas-fired Kewanee boiler, ID5 with a heat input capacity of 10.46 mmBtu/hr.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-8-4(1)]

D.2.1 Particulate Matter Limitation (PM) [326 IAC 6-2-2]

Pursuant to 326 IAC 6-2-2 (a) (Particulate emission limitations for sources of indirect heating): emission limitations from 10.46 mmBtu/hr boiler, ID5 shall be limited to 0.58 pounds per MMBtu heat input.

This limitation is based on the following equation:

$$Pt = \frac{0.87}{Q^{0.16}}$$

Where: Pt = pounds of PM emitted per million Btu heat input
Q = total source maximum operating capacity rating in mmBtu/hr heat input

SECTION D.3 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-8-4(10): Insignificant Activities]

- (1) One (1) 7.5 mm Btu/hr liquid tube heater;
- (2) One (1) 4.5 mm Btu/hr liquid tube heater;
- (3) Two (2) 2.0 mm Btu/hr liquid tube heater;
- (4) One (1) 0.75 mmBtu/hr thermal fluid heater;
- (5) One (1) 3.4 mmBtu/hr boiler;
- (6) One (1) 1.043 mmBtu/hr seal use mix heater/tube heater;
- (7) Two (2) furnaces each with a heat input capacity of 0.1 mmBtu/hr;
- (8) Two (2) furnaces each with a heat input capacity of 0.08 mmBtu/hr;
- (9) Two (2) 0.075 mmBtu/hr furnace;
- (10) One (1) 0.03 mmBtu/hr heater;
- (11) One (1) 0.055 mmBtu/hr water heater;
- (12) Two (2) makeup air heater each with a heat input capacity of 2.5 mmBtu/hr; and
- (13) One (1) RTO with a heat input capacity of 1.0 mmBtu/hr.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Boiler Natural Gas-fired - less than 10 MMBtu/hr

Emission Limitations and Standards [326 IAC 2-8-4(1)]

D.3.1 Particulate Matter (PM) [326 IAC 6-2-2]

Pursuant to 326 IAC 6-2-2 (Particulate Matter Emission Limitations for Sources of Indirect Heating, the PM emissions from the 3.4 MMBtu per hour heat input boiler shall be limited to 0.58 pounds per MMBtu heat input.

This limitation is based on the following equation:

$$P_t = \frac{0.87}{Q^{0.16}}$$

Where: P_t = pounds of PM emitted per million Btu heat input
 Q = total source maximum operating capacity rating in mmBtu/hr heat input

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR MANAGEMENT
COMPLIANCE DATA SECTION**

**NSR/FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP)
CERTIFICATION**

Source Name: Globe Building Materials, Inc.
Source Address: 2207 Schrage Avenue, Whiting, Indiana 46394
Mailing Address: 2207 Schrage Avenue, Whiting, Indiana 46394
NSR/FESOP No.: 089-12500-00012

**This certification shall be included when submitting monitoring, testing reports/results
or other documents as required by this permit.**

Please check what document is being certified:

- 9 Annual Compliance Certification Letter
- 9 Test Result (specify) _____
- 9 Report (specify) _____
- 9 Notification (specify) _____
- 9 Affidavit (specify) _____
- 9 Other (specify) _____

I certify that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

Signature:

Printed Name:

Title/Position:

Date:

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR MANAGEMENT
COMPLIANCE DATA SECTION**

**FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP)
NATURAL GAS FIRED BOILER CERTIFICATION**

Source Name: Globe Building Materials, Inc.
Source Address: 2207 Schrage Avenue, Whiting, Indiana 46394
Mailing Address: 2207 Schrage Avenue, Whiting, Indiana 46394
NSR/FESOP No.: 089-12500-00012

**This certification shall be included when submitting monitoring, testing reports/results
or other documents as required by this permit.**

Report period

Beginning: _____

Ending: _____

Boiler Affected

Alternate Fuel

Days burning alternate fuel
From To

I certify that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

Signature: _____

Printed Name: _____

Title/Position: _____

Date: _____

A certification by the authorized individual as defined by 326 IAC 2-1.1-1(1) is not required for this report.

**OFFICE OF AIR MANAGEMENT
COMPLIANCE DATA SECTION
P.O. Box 6015
100 North Senate Avenue
Indianapolis, Indiana 46206-6015
Phone: 317-233-5674
Fax: 317-233-5967**

**FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP)
QUARTERLY DEVIATION AND COMPLIANCE MONITORING REPORT**

Source Name: Globe Building Materials, Inc.
Source Address: 2207 Schrage Avenue, Whiting, Indiana 46394
Mailing Address: 2207 Schrage Avenue, Whiting, Indiana 46394
NSR/FESOP No.: 089-12500-00012

Months: _____ to _____ Year: _____

Page 1 of 2

This report is an affirmation that the source has met all the requirements stated in this permit. This report shall be submitted quarterly based on a calendar year. Any deviation from the requirements, the date(s) of each deviation, the probable cause of the deviation, and the response steps taken must be reported. Deviations that are required to be reported by an applicable requirement shall be reported according to the schedule stated in the applicable requirement and do not need to be included in this report. Additional pages may be attached if necessary. If no deviations occurred, please specify in the box marked "No deviations occurred this reporting period".

9 NO DEVIATIONS OCCURRED THIS REPORTING PERIOD.

9 THE FOLLOWING DEVIATIONS OCCURRED THIS REPORTING PERIOD

Permit Requirement (specify permit condition #)

Date of Deviation:

Duration of Deviation:

Number of Deviations:

Probable Cause of Deviation:

Response Steps Taken:

Permit Requirement (specify permit condition #)

Date of Deviation:

Duration of Deviation:

Number of Deviations:

Probable Cause of Deviation:

Response Steps Taken:

Permit Requirement (specify permit condition #)	
Date of Deviation:	Duration of Deviation:
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	
Permit Requirement (specify permit condition #)	
Date of Deviation:	Duration of Deviation:
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	
Permit Requirement (specify permit condition #)	
Date of Deviation:	Duration of Deviation:
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	

Form Completed By: _____

Title/Position: _____

Date: _____

Phone: _____

Attach a signed certification to complete this report.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR MANAGEMENT
COMPLIANCE DATA SECTION**

**and
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
NORTHWEST INDIANA OFFICE**

**NSR/FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP)
Quarterly Report**

Source Name: Globe Building Materials, Inc.
Source Address: 2207 Schrage Avenue, Whiting, Indiana 46394
Mailing Address: 2207 Schrage Avenue, Whiting, Indiana 46394
NSR/FESOP No.: 089-12500-00012
Source/Facility: Saturators/Coaters 1 and 2
Pollutant: Volatile Organic Compounds (VOC)
Limit: Combined limit of 453,000 tons of asphalt shingles and rolls per twelve (12) month period, rolled on a monthly basis, and using emission factor of 0.098 pound of VOC per ton of roof rolls or shingles produced to determine the VOC limit of 22.2 tons per 12-month.

Month: _____ **Year:** _____

Month	Column 1		Column 2		Column 1 + Column 2	
	Roof Rolls/Shingles Produced This Month (tons)	VOC Emitted This Month (tons)	Roof Rolls/Shingles Produced Previous 11 Months (tons)	VOC Emitted Previous 11 Months (tons)	Roof Rolls/Shingles Produced 12 Month Total (tons)	VOC Emitted 12 Month Total (tons)
Month 1						
Month 2						
Month 3						

Submitted by: _____

Title/Position: _____

Signature: _____

Date: _____

OFFICE OF AIR MANAGEMENT COMPLIANCE DATA SECTION

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP) EMERGENCY OCCURRENCE REPORT

Source Name: Globe Building Materials, Inc.
Source Address: 2207 Schrage Avenue, Whiting, Indiana 46394
Mailing Address: 2207 Schrage Avenue, Whiting, Indiana 46394
NSR/FESOP No.: 089-12500-00012

Months: _____ to _____ Year: _____

This form consists of 2 pages

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- 9 This is an emergency as defined in 326 IAC 2-7-1(12)
CThe Permittee must notify the Office of Air Management (OAM), within four (4) business hours (1-800-451-6027 or 317-233-5674, ask for Compliance Section); and
CThe Permittee must submit notice in writing or by facsimile within two (2) days (Facsimile Number: 317-233-5967), and follow the other requirements of 326 IAC 2-7-16.

If any of the following are not applicable, mark N/A

Facility/Equipment/Operation:

Control Equipment:

Permit Condition or Operation Limitation in Permit:

Description of the Emergency:

Describe the cause of the Emergency:

If any of the following are not applicable, mark N/A

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Date/Time Emergency started:
Date/Time Emergency was corrected:
Was the facility being properly operated at the time of the emergency? Y N Describe:
Type of Pollutants Emitted: TSP, PM-10, SO ₂ , VOC, NO _x , CO, Pb, other:
Estimated amount of pollutant(s) emitted during emergency:
Describe the steps taken to mitigate the problem:
Describe the corrective actions/response steps taken:
Describe the measures taken to minimize emissions:
If applicable, describe the reasons why continued operation of the facilities are necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw materials of substantial economic value:

Form Completed by: _____

Title / Position: _____

Date: _____

Phone: _____

A certification is not required for this report.

Indiana Department of Environmental Management Office of Air Management

Technical Support Document (TSD) for a New Source Review (NSR) and Federally Enforceable State Operating Permit (FESOP)

Source Background And Description

Source Name:	Globe Building Materials, Inc.
Source Location:	2207 Schrage Avenue, Whiting, Indiana 46394
County:	Lake
SIC Code:	2952
Operation Permit No.:	NSR/FESOP 089-12500-00012
Permit Reviewer:	Aida De Guzman

The Office of Air Management (OAM) has reviewed a Permit (FESOP) application from Globe Building Materials, Inc. relating to the operation of an asphalt saturated felt and laminated roofing manufacturing plant.

The source consists of the following emission units and pollution control devices:

- (a) Production line 1, which is currently used to produce asphalt roof shingles, consists of a saturator/coater 1 with a maximum capacity of 61.39 tons of roof shingles per hour. Particulate Matter (PM) emissions from this line are controlled by Electrostatic Precipitators CE1;
- (b) Modification to production line 2, which is currently used to produce asphalt roof rolls, consists of a saturator/coater 2. This line is capable of producing a maximum of 11.69 tons of asphalt roof rolls per hour. The modification will give this line a capability to alternately produce laminated shingles at a maximum rate of 47.28 tons per hour. Particulate Matter (PM) emissions from this line are controlled by Electrostatic Precipitator CE2.
- (c) Seven (7) Storage Tanks:
 One (1) proposed new adhesive (Polymer Modified Asphalt) tank with a capacity of 500 gallons,
 One (1) new heated laminate sealant storage tank with a capacity of 9,000 gallons,
 One (1) existing heated south saturant storage tank with a capacity of 21,000 gallons,
 One (1) existing heated roll saturant flux storage tank with a capacity of 21,000 gallons,
 One (1) existing heated coating storage tank with a capacity of 40,000 gallons,
 One (1) existing heated seal adhesive storage tank with a capacity of 15,000 gallons, and
 One (1) existing north saturant storage tank with a capacity of 21,000 gallons.

 These tanks are controlled by a 1.0 million British Thermal Units per hour (mmBtu/hr) regenerative thermal oxidizer (RTO), identified as CE9;
- (d) A limestone unloading, storage heating and handling, which has a maximum capacity of 60, 847 tons per year, and is controlled by three (3) baghouses, CE3, CE4, and CE5; and

- (e) Talc and silica sand handling and recovery, which has a maximum capacity of 20,000 tons per year, and is controlled by two (2) dust collectors DC1 and DC2.
- (f) One (1) natural gas-fired Kewanee boiler, ID5 with a heat input capacity of 10.46 mmBtu/hr.

The source also includes the following insignificant activities:

- (a) Natural gas-fired combustion sources with heat input equal to or less than ten million (10,000,000) Btu per hour.
 - (1) One (1) 7.5 mm Btu/hr liquid tube heater;
 - (2) One (1) 4.5 mm Btu/hr liquid tube heater;
 - (3) Two (2) 2.0 mm Btu/hr liquid tube heater;
 - (4) One (1) 0.75 mmBtu/hr thermal fluid heater;
 - (5) One (1) 3.4 mmBtu/hr boiler;
 - (f) One (1) 1.043 mmBtu/hr seal use mix heater/tube heater;
 - (7) Two (2) furnaces each with a heat input capacity of 0.1 mmBtu/hr;
 - (8) Two (2) furnaces each with a heat input capacity of 0.08 mmBtu/hr;
 - (9) Two (2) 0.075 mmBtu/hr furnace;
 - (10) One (1) 0.03 mmBtu/hr heater;
 - (11) One (1) 0.055 mmBtu/hr water heater;
 - (12) Two (2) makeup air heater each with a heat input capacity of 2.5 mmBtu/hr; and.
 - (13) One (1) RTO with a heat input capacity of 1.0 mmBtu/hr.
- (b) Other activities or categories with emissions equal to or less than 3 pounds of VOC per hour or 15 pound per day.
 - (1) Printing operation

Existing Approvals

The source has been operating under previous approvals including, but not limited to the following:

- (a) Operation Permit No. 45-05-89-045, issued on September 12, 1985.

Enforcement Issue

Agreed Order AO Clauses A1764 and A1873, were issued on March 22, 1993, and were settled in April, 1993. Notice of Violation Case No. 1999-8466A was issued on January 11, 2000 and was settled on April 24, 2000.

Recommendation

The staff recommends to the Commissioner that the FESOP be approved. This recommendation is based on the following facts and conditions:

Information, unless otherwise stated, used in this review was derived from the application and additional information submitted by the applicant.

A complete FESOP application for the purposes of this review was received on December 19, 1996, with series of additional information received on March 18, 1997 and April 14, 1997. A new

FESOP application was re-submitted on July 19, 2000 which includes a New Source Review, and additional information was on August 31, 2000.

Potential to Emit (PTE) Calculations

- (1) Asphalt and Laminated Roof Manufacturing Emissions:
Using Emission Factors found in AP-42, Tables 11.2-2, and 11.2-4
- (a) Line 1 - Saturator/Coater 1, Drying, Wet Looper and Coating PM/PM10 Emissions:
- | | | |
|----------------------|---|---|
| Maximum production | = | 61.39 tons of roof rolls/hour |
| Uncontrolled PM/PM10 | = | $61.39 \text{ tons/hr} * 8760 \text{ hrs/yr} * 1.2 \text{ lb/ton} * \text{ton/2000 lb}$ |
| | = | 323 tons/year |
| Controlled PM/PM10 | = | $61.39 \text{ tons/hr} * 8760 \text{ hrs/yr} * 0.032 \text{ lb/ton} * \text{ton/2000 lb}$ |
| | = | 8.6 tons/year |
- (b) Line 1 - Saturator/Coater 1, Drying, Wet Looper and Coating VOC Emissions with Electrostatic Precipitator (ESP):
- :
- | | | |
|-----|---|---|
| VOC | = | $61.39 \text{ tons/hr} * 8760 \text{ hrs/yr} * 0.098 \text{ lb/ton} * \text{ton/2000 lb}$ |
| | = | 26.4 tons/year |
- (c) Line 1 - Saturator/Coater 1, Drying, Wet Looper and Coating CO Emissions:
- | | | |
|----|---|--|
| CO | = | $61.39 \text{ tons/hr} * 8760 \text{ hrs/yr} * 0.0019 \text{ lb/ton} * \text{ton/2000 lb}$ |
| | = | 0.5 ton/year |
- (d) Line 1 - Saturator/Coater 2, Drying, Wet Looper and Coating PM/PM10 Emissions:
- | | | |
|-----------------------|---|---|
| Maximum production | = | 47.28 tons of roof rolls/hour |
| Uncontrolled PM=PM10= | = | $47.28 \text{ tons/hr} * 8760 \text{ hrs/yr} * 1.2 \text{ lb/ton} * \text{ton/2000 lb}$ |
| | = | 248.5 tons/year |
| Controlled PM=PM10 | = | $47.28 \text{ tons/hr} * 8760 \text{ hrs/yr} * 0.032 \text{ lb/ton} * \text{ton/2000 lb}$ |
| | = | 6.6 tons/year |
- (e) Line 2 - Saturator/Coater 2, Drying, Wet Looper and Coating VOC Emissions with Electrostatic Precipitator (ESP):
- | | | |
|-----|---|---|
| VOC | = | $47.28 \text{ tons/hr} * 8760 \text{ hrs/yr} * 0.098 \text{ lb/ton} * \text{ton/2000 lb}$ |
| | = | 20.3 tons/year |

(f) Line 2 - Saturator/Coater 2, Drying, Wet Looper and Coating CO Emissions:

$$\begin{aligned}\text{CO} &= 47.28 \text{ tons/hr} * 8760 \text{ hrs/yr} * 0.0019 \text{ lb/ton} * \\ &\quad \text{ton/2000 lb} \\ &= 0.4 \text{ ton/year}\end{aligned}$$

(g) Line 2 Adhesive Application Emissions:

There is no VOC emissions coming from this process, because the type of adhesive used does not volatilize at the source's working temperature of less than 500 °F.

(2) Heated Storage Tanks Emissions:

These five (5) storage tanks are claimed to have insignificant VOC emissions. Although, they are insignificant they are ducted to the RTO to control the odor.

(3) Limestone Handling Emissions:

Limestone is pneumatically conveyed and the baghouse is used to recover the material. Therefore, the baghouse is part of the process, and PM emission is calculated after control.

Throughput = 60,847 ton/yr, using Emission Factor for cement unloading found in SCC30-50-11-07.

Uncontrolled/Controlled PM Emissions:

$$\begin{aligned}&= 60,847 \text{ ton/yr} * 0.24 \text{ lb/ton} * \text{ton/2000 lb} \\ &= 7.3 \text{ ton/yr} \\ &= 7.3 \text{ ton/yr} (1-.99) \\ &= 0.1 \text{ ton/yr}\end{aligned}$$

Uncontrolled/Controlled PM10 Emissions:

$$\begin{aligned}&= 60,847 \text{ ton/yr} * 0.14 \text{ lb/ton} * \text{ton/2000 lb} \\ &= 4.25 \text{ ton/yr} (1-.99) \\ &= 0.04 \text{ ton/yr}\end{aligned}$$

(4) Talc and Silica Sand Handling Emissions:

Talc and silica sand is pneumatically conveyed and the baghouse is used to recover the material. Therefore, the baghouse is part of the process, and PM emission is calculated after control.

$$\text{Throughput} = 20,000 \text{ ton/yr}$$

Uncontrolled/Controlled PM Emissions:

$$\begin{aligned}&= 20,000 \text{ ton/yr} * 0.24 \text{ lb/ton} * \text{ton/2000 lb} \\ &= 2.4 \text{ ton/yr} \\ &= 2.4 \text{ ton/yr} (1-.99) \\ &= 0.0 \text{ ton/yr}\end{aligned}$$

Uncontrolled/Controlled PM10 Emissions:

$$\begin{aligned}&= 20,000 \text{ ton/yr} * 0.14 \text{ lb/ton} * \text{ton/2000 lb} \\ &= 1.4 \text{ ton/yr} \\ &= 1.4 \text{ ton/yr} (1-.99) \\ &= 0.01 \text{ ton/yr}\end{aligned}$$

(5) Natural gas-fired boiler, ID5 rated at 10.46 mmBtu/hr: See page 1 of 2 TSD Appendix A for detailed calculations.

(6) Insignificant activities:

(a) Printing VOC Emissions = 0.0001 gal of ink/sq * 6.6094 lb of VOC/gal ink
 = 0.000 66 lb/sq
 = 0.00066 lb/sq * 2000 lb/ton * 453,000 tons of roofing prod/yr
 * sq/227.38 lb prod wt. * ton/2000 lb
 = 1.3 ton/yr

(b) Natural Gas Combustion Facilities: See page 2 of 2 TSD Appendix A for detailed calculations.

SUMMARY OF EMISSIONS (TONS/YEAR)								
Process/Facility	Uncontrolled PM Emissions	Controlled PM Emissions	Uncontrolled PM10 Emissions (tons/year)	Controlled PM10 Emissions	VOC Emissions	NOx Emissions	SO2 Emissions	CO Emissions
Saturator/Coater 1, Dryer, Wet Looper	323.0	8.6	323.0	8.6	26.4	0.0	0.0	0.5
Saturator/Coater 2, Dryer, Wet Looper	248.5	6.6	248.5	6.6	20.3	0.0	0.0	0.4
Limestone Handling	0.1	0.1	0.04	0.04	0.0	0.0	0.0	0.0
Talc and Silica Sand Handling	0.01	0.01	0.0	0.0	0.0	0.0	0.0	0.0
Kewanee boiler	0.1	0.1	0.3	0.3	0.3	4.6	0.0	3.8
Insignificant Activities:								
Printing	0.0	0.0	0.0	0.0	1.3	0.0	0.0	0.0
Natural Gas Combustion	0.2	0.2	0.9	0.9	0.7	12.2	0.1	10.2
TOTAL	571.9	15.6	572.74	16.7	49.0	16.8	0.2	14.9

Potential To Emit

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as “the maximum capacity of a stationary source to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA.”

This table reflects the PTE before controls. Control equipment is not considered federally enforceable until it has been required in a federally enforceable permit.

Pollutant	PTE (tons/year)
PM	571.9
PM-10	572.74
VOC	50.8
CO	14.9
NO _x	16.8

Note: For the purpose of determining Title V applicability for particulates, PM-10, not PM, is the regulated pollutant in consideration.

- (1) The potential to emit (as defined in the Indiana Rule) of VOC are greater than 25 tons per year and PM10 are greater than 100 tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-7-1.

The source has elected to operate under Federally Enforceable State Operating Permit (FESOP).

County Attainment Status

The source is located in Lake County.

Pollutant	Status (attainment or unclassifiable/ severe, moderate, marginal, or maintenance nonattainment)
PM-10	moderate nonattainment
SO ₂	An area bounded on the north by Lake Michigan, on the west by the Indiana-Illinois State line, on the south by U.S. 30 from the State line to the intersection of I-65 then following I-65 to the intersection of I-94 then following I-94 to the Lake-Porter County line, & on the east by the Lake-Porter County line is nonattainment and the remainder of Lake County is attainment.
Ozone	Severe

CO	Part of City of East Chicago (area bounded by Columbus Drive on the north, the Indiana Harbor Canal on the west, 148 th St. if extended, on the south and Euclid Ave. on the east is nonattainment.
----	---

Limited / Controlled Potential to Emit

Existing Source PSD, Part 70 or FESOP Definition (based on throughput limit):

The source has accepted a federally enforceable VOC limit of less than 25 tons per year, and less than 100 tons of PM10 per year.

	Potential to Emit (Tons/Year)
Process/facility	VOC
Asphalt roofing Production Lines 1 & 2	< 22.2
Boiler ID5	0.3
Insignificant Activities, Printing and nat. gas units < 10 mmBtu/hr	2.0
*Flexibility Allowance	0.5
Total Emissions	< 25.0

* 0.5 ton/yr was added as a cushion for adding insignificant activities.

- (a) The asphalt roof production is limited in order to restrict the VOC emissions to less than 22.2 tons per year. This limit took into account the VOC emissions coming from the boiler and the insignificant activities, so the sourcewide VOC will stay below 25 tons per year (threshold for severe nonattainment area). This production limitation will also automatically limit the PM10 emissions.

$$\begin{aligned}
 \text{Combined Production Limit from Line 1 and 2} &= 22.2 \text{ tons VOC/yr} * 2000 \text{ lb/ton} * \\
 &= 453,000 \text{ tons/year asphalt roof shingles and rolls}
 \end{aligned}$$

$$\begin{aligned}
 \text{PM10 Emissions Limit with the Electrostatic Precipitators} &= 453,000 \text{ tons/yr} * 0.032 \\
 &= 7.2 \text{ tons/year}
 \end{aligned}$$

- (b) This existing source is **not** a major stationary source because VOC and NOx a severe nonattainment regulated pollutants are not emitted at a rate of 25 tons per year or greater and and all the moderate nonattainment pollutants (PM10, SO2, and CO), are not emitted at a rate of 100 tons per year, and it is not in one of the 28 listed source categories.

Federal Rule Applicability

- (a) New Source Performance Standards (NSPS)
(1) 40 CFR § 60.40, Subpart Dc-Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units for which construction, modification or reconstruction is commenced after June 9, 1989 and that has a maximum design input capacity of 100 mmBtu/hr or less, but greater than 10 mmBtu/hr.

Boiler ID5 rated at 10.46 mmBtu/hr, will not be subject to this rule, because its date of construction (1973) predates the rule.

- (2) 40 CFR § 60.470, Subpart UU - Standards of Performance for Asphalt Processing and Asphalt Roofing manufacture. This rule applies to each saturator, mineral handling, and asphalt storage tank at an asphalt roofing plant, that commences construction or modification after November 18, 1980 and is subject to any requirements in this subpart.

Facility	Construction or Modification Date
Saturator/coater 1	December, 1976
saturator/coater 2	Proposed modification
Mineral Conveying and Storage facility: Limestone Storage Tank Limestone pneumatic conveyor Talc and silica sand conveyor (screw)	1962 1962 Proposed modification
Asphalt Heated Storage Tanks New adhesive (Polymer Modified Asphalt) tank New heated laminate sealant storage tank S. Saturant Storage Tank Roll Saturant Flux Storage Tank Coating Storage Tank Seal Adhesive Storage Tank N. Saturant Storage Tank	Proposed Proposed 1951 1978 1977 1948 1951

All the above facilities will not be subject to 40 CFR § 60.470, Subpart UU because their construction dates predate the rule, except for the saturator/coater 2 modification, talc screw conveyor, new adhesive (Polymer Modified Asphalt) tank, and the new heated laminate sealant storage tank.

Within 60 days after achieving the maximum production rate at which the affected facility will be operated, but not later than 180 days after initial start, the following limits shall apply:

- (a) The modification of saturator 2 is limited to 0.04 kilogram (kg) of particulate matter per megagram (MG) of asphalt shingle or mineral-surfaced roll roofing produced (0.08 lb/ton); or 0.4 kg/Mg of saturated felt or smooth-surfaced roll roofing (0.8 lb/ton)
note: 1 Mg = 2,204 lbs 1 kg = 2.204 lbs

Saturator 2 is in compliance with the limits using Electrostatic Precipitator (ESP), to control the PM.

The modification of saturator 2 is **not** subject to the opacity limit.

- (b) Talc and silica sand screw conveyor system, and storage facility are limited to an opacity not greater than one (1%) percent.
- (c) Adhesive (Polymer Modified Asphalt) tank and the new heated laminate sealant storage tank are limited to an opacity not greater than zero (0%) percent, except for one consecutive 15-minute period in any 24-hour period when the transfer lines are being blown for clearing. The control device shall not be by-passed during this 15-minute period.

Tests Methods and Procedures:

- (a) For saturator 2, the owner or operator shall conduct performance tests in § 60.8 as follows:
 - (1) If the final product for saturator 2 is shingle or mineral-surfaced roll roofing, the tests shall be conducted while 235-pound shingle is being produced.
 - (2) If the final product for saturator 2 is felt or smooth-surfaced roll roofing, the tests shall be conducted while 15-pound felt is being produced.
 - (3) If the final product for saturator 2 is fiberglass shingle, the tests shall be conducted while a nominal 220-pound felt is being produced.
- (b) In conducting the performance tests required in § 60.8, the owner or operator shall use as reference methods and procedures the test methods in Appendix A of this part or other methods and procedures as specified in this section, except as provided in § 60.8(b).
- (c) The owner or operator shall determine compliance with the particulate matter standards for saturator 2 found in § 60.472 as follows:
 - (1) The emission rate (E) of particulate matter shall be computed for each run using the following equation:

$$E = (C_s Q_{sd}) / (PK)$$

Where:

E = emission rate of particulate matter, kg/Mg
C_s = concentration of particulate matter, g/dscm (g/dscf)
Q_{sd} = volumetric flow rate of effluent gas, dscm/hr (dscf/hr)
P = asphalt roofing production rate or asphalt charging rate, Mg/hr (ton/hr)
K = conversion factor, 1000g/kg [907.2/(g-Mg)/(kg-ton)]

- (d) Opacity limits required for the talc/silica sand screw conveyor system, and its storage facility, adhesive (Polymer Modified Asphalt) tank) and

the new heated laminate sealant storage tank shall be determined using Method 9 and the procedures in § 60.11.

Monitoring of Operations:

- (a) The owner or operator subject to the provisions of this subpart and using an Electrostatic Precipitator (ESP) to meet the PM limit in § 60.472 shall continuously monitor and record the temperature of the gas at the inlet of the ESP. The temperature monitoring instrument shall have an accuracy of $\pm 15^{\circ}\text{C}$ over its range.
 - (b) The owner or operator subject to the provisions of this subpart shall provide the Administrator information describing the operation of the ESP and the process parameter which would indicate proper operation and maintenance of the device. The Administrator may require continuous monitoring and will determine the process parameters to be monitored.
- (3) 40 CFR part 60.110b, Subpart Kb - Standards or Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for which Construction, Reconstruction, or Modification Commenced after July 23, 1984.

The following storage tanks are not subject to this NSPS because they were constructed prior to the promulgation of the rule, except for the two (2) proposed tanks which are subject to the 40 CFR Part 60.470, Subpart UU (see page 8 of 16 of this TSD for determination).

Facility	Construction or Modification Date
Asphalt Heated Storage Tanks	
New adhesive (Polymer Modified Asphalt) tank	Proposed
New heated laminate sealant storage tank	Proposed
S. Saturant Storage Tank	1951
Roll Saturant Flux Storage Tank	1978
Coating Storage Tank	1977
Seal Adhesive Storage Tank	1948
N. Saturant Storage Tank	1951

- (4) No other New Source Performance Standards will apply.
- (b) National Emission Standards for Hazardous Air Pollutants (NESHAP)
There are no NESHAP that are applicable to the source.

State Rule Applicability - Entire Source

- (a) 326 IAC 2-6 (Emission Reporting)
This source is subject to 326 IAC 2-6 (Emission Reporting), because it has the potential to emit more than ten (10) tons per year of VOC and it is located in Lake County. Pursuant to this rule, the owner/operator of the source must annually submit an emission statement for the source. The annual statement must be received by April 15 of each year and contain the minimum requirement as specified in 326 IAC 2-6-4. The submittal

should cover the period defined in 326 IAC 2-6-2(8)(Emission Statement Operating Year).

State Rule Applicability - Individual Facilities

- (a) 326 IAC 8-1-6: General Reduction Requirements
New facilities as of January 1, 1980 which have potential VOC emissions of 25 tons per year which are not subject by any other provisions in Article 8 will be subject to this rule. Saturator 1 was constructed in December, 1976; Saturator 2 was constructed in December, 1944. Therefore, these two facilities are not subject to this rule, since their construction dates predate the rule. Since the saturator includes the coater as defined in 40 CFR Part 60.471, the construction of coaters 1 and 2 in 1995 and 1982 respectively are called modification to the facilities saturators. The rule does not apply to modification either.

Note: 40 CFR Part 60.471 defines Saturator as the equipment in which asphalt is applied to the felt to make asphalt roofing products. The term "saturator" includes the saturator, wet looper, and coater.

- (b) 326 IAC 8-6-1: Organic Solvent Emission Limitation
This rule applies to sources existing as of January 1, 1980 located in Lake and Marion Counties with potential emissions of 100 tons of VOC per year or greater that are not limited by other rules in Article 8.

The asphalt roof production plant will not be subject to this rule, because its potential VOC emissions are less than 100 tons per year, and predates the rule.

- (c) 326 IAC 8-7: Specific VOC Reduction Requirements for Lake, Porter, Clark and Floyd Counties.
Section 2 of this rule applies to sources in Lake County that emit or have the potential to emit VOC at levels equal or greater than twenty-five (25) tons per year. Section 2 of this rule is not applicable to Globe Building Materials, Inc. because its PTE volatile organic compounds was limited to less than 25 tons per year.

- (d) 326 IAC 8: Volatile organic Sources
No other provisions in Article 8 will apply to this source.

- (e) 326 IAC 6-1-2: Particulate Emission Limitation
This rule applies to the following facilities, which mandates a limit of 0.03 grain per dry standard cubic foot (gr/dscf), with the pounds per hour (lbs/hr) equivalent PM emissions:

Facility	PM Emission Limit (gr/dscf)	Air Flow Rate (dry standard cubic feet/minute)	PM Emission Limit (lbs/hr)
Saturator/coater 1	0.03 gr/dscf	15,000	3.85
Saturator/coater 2 Modification	0.08 lb/ton when asphalt shingle or mineral-surfaced roll is produced *0.03 gr/dscf	15,000	3.85
Limestone Handling	0.03 gr/dscf	3,500	0.9
Talc and Silica Sand Handling	0.03 gr/dscf	1,500	0.38

* Limit when saturated felt or smooth-surfaced roll is produced.

The calculations below shows which limit is more stringent (NSPS, or the grain loading). The more stringent between the two limits will apply for the saturator 2, since it is both subject from 40 CFR Part 60, Subpart UU (NSPS) and 326 IAC 6-1:

Saturator 2 Limit under 326 IAC 6-1			Saturator 2 Limit Under 40 CFR Part 60, Subpart UU		
Grain Loading Limit (gr/dscf)	Air Flow Rate (dry standard cubic feet/minute)	PM Emissions (lb/hr)	NSPS Limit (lb/ton)	Production Limit (ton/hr)	PM Emissions (lb/hr)
0.03	15,000	3.85	0.08 when asphalt shingle or mineral-surfaced roll is produced	* 22.5	1.8
0.03	15,000	3.85	0.8 lb/ton when saturated felt or smooth-surfaced roll is produced	*22.5	18.00

* Based on prorating the unit's capacity = unit capacity/total saturators capacity * production limit.
= 47.28 ton/hr / 108.67 ton/hr * 453,000 ton/yr /8760 hr/yr

The source is in compliance with the limits, since these facilities control equipment have outlet grain loading less than 0.03 gr/dscf. Saturator is in compliance with the NSPS limit using an ESP.

- (f) 326 IAC 6-1-10.1: PM10 Emission Requirement
This rule specifically mandates a PM10 emission limit of 0.060 pound per ton (lb/ton) of product and 4.5 pounds per hour (lb/hr), on the two (2) asphalt saturators 1 and 2. Compliance with this limit will make 326 IAC 2-7 not applicable.
- (g) 326 IAC 6-1-11.1: Fugitive Particulate Matter Control Requirements
This rule applies to the following facilities and operation at the source having the potential to emit 5 tons per year fugitive PM emissions, and shall have the following limitation mandated in this rule:
- (1) Under Section (d)(1) of this rule, for paved roads and parking lots - The average instantaneous opacity of fugitive particulate matter emissions from a paved road shall not exceed ten percent (10%).
 - (2) Under Section (d)(2) of this rule, for unpaved roads and parking lots - The average instantaneous opacity of fugitive particulate matter emissions from an unpaved road shall not exceed ten percent (10%).
 - (3) Under Section (d)(3) of this rule, for material transfer -
 - (A) The average instantaneous opacity of fugitive particulate emissions from batch transfer shall not exceed ten percent (10%), and

(B) Where adequate wetting of the material for fugitive particulate matter emissions control is prohibitive to further processing of or reuse of the material, the opacity shall not exceed ten percent (10%) three (3) minute average.

- (4) Under Section (d)(4), the fugitive particulate emissions from continuous transfer of material onto and out of storage piles shall not exceed ten (10%) on a three (3) minute average.

The opacity shall be determined using 40 CFR 60, Appendix A, Method 9.

- (5) Under Section (d)(5) of this rule, for wind erosion from storage piles and exposed areas - The opacity of fugitive particulate matter emissions from storage piles shall not exceed ten percent (10%) on a six (6) minute average. These limitations may not apply during periods when application of fugitive particulate control measures are either ineffective or unreasonable due to sustained very high wind speed. During such period, the company must continue to implement all reasonable fugitive particulate control measures and maintain records documenting the application of measures and the basis for a claim that meeting the opacity limitation was not reasonable given prevailing wind condition.

The opacity of fugitive particulate emissions from exposed areas shall not exceed ten percent (10%) on a six (6) minute average.

The opacity shall be determined using 40 CFR 60, Appendix A, Method 9.

- (6) Under Section (d)(6) of this rule, for material transportation activities -

(A) There shall be a zero (0) percent frequency of visible emissions observations of material during the inplant transportation of material by truck or rail at any time.

Compliance with this limitation shall be determined by 40 CFR 60, Appendix A, Method 22.

(B) The opacity of fugitive particulate emissions from the inplant transportation of material by front end loaders and skip hoists shall not exceed ten percent (10%).

- (7) Under Section (d)(7) of this rule, for material processing facilities -

(A) The PM10 stack emissions from a material processing facility shall not exceed twenty-two thousandths (0.022) grains per dry standard cubic foot and ten percent (10%) opacity.

Compliance with the opacity limitation shall be determined by 40 CFR 60, Appendix A, Method 9.

- (B) The opacity of fugitive particulate emissions from a material processing facility except crusher at which a capture system is not used, shall not exceed ten percent (10%).

Compliance with the opacity limitation shall be determined by 40 CFR 60, Appendix A, Method 9.

- (D) There shall be a zero percent (0%) frequency of visible emission observation from a building enclosing all or a part of the material processing equipment, except from a vent in the building.

Compliance with the opacity limitation shall be determined by 40 CFR 60, Appendix A, Method 22.

- (E) The PM₁₀ emissions from building vents shall not exceed twenty-two thousandths (0.022) grains per dry standard cubic foot and ten percent (10%) opacity.

Compliance with the opacity limitation shall be determined by 40 CFR 60, Appendix A, Method 9.

- (8) Under Section (d)(8) of this rule, for dust handling equipment - The opacity of particulate emissions from dust handling equipment shall not exceed ten percent (10%).

Compliance with the opacity limitation shall be determined by 40 CFR 60, Appendix A, Method 9.

- (9) Under Section (d)(9) of this rule, for any facility or operation not specified in this subsection shall meet a twenty percent (20%), three (3) minute opacity standard.

Compliance with the opacity limitation shall be determined by 40 CFR 60, Appendix A, Method 9.

- (10) Any facility in this rule that did not specify the method of compliance with the opacity limit shall use the method specified in this rule (see attached).

- (h) 326 IAC 6-1-11.2: Particulate Matter Contingency Measures
This rule applies to the source since it is one of the sources listed under section 10.1(d), and since section 11.1(a) of this rule applied. This source is subject to the contingency measures specified in the rule, (see attached).

- (i) 326 IAC 6-2: Allowable PM Emissions from Indirect Heating Facility
The 10.46 mmBtu/hr natural gas-fired boiler ID5, which was constructed in 1973, shall be subject to this rule, which mandates a PM allowable emissions using the following equation:

$$\begin{aligned} \text{Pt} &= \frac{0.87}{Q^{0.16}} \\ &= \underline{0.87} \end{aligned}$$

1.8
= 0.57 lb/mmBtu, which is equivalent to 5.96 pounds per hour. The boiler is in compliance with the rule, since its PM emissions of 0.012 lb/mmBtu is less than the limit.

Where: Pt = pounds of PM emitted per million Btu heat input
Q = total source maximum operating capacity rating in mmBtu/hr heat input
= 3.4 + 10.46 mmBtu/hr
= 13.86 mmBtu/hr

Using natural gas:
 $12 \text{ lb/MMCF} * \text{MMCF}/1000 \text{ mmBtu} = 0.012 \text{ lb/mmBtu} < 0.012 \text{ lb/mmBtu}$, therefore the source is in compliance.

- (j) 326 IAC 2-1.1-11: Air Quality Requirements
The 1.0 mmBtu/hr natural gas-fired oxidizer will be required to operate at a temperature of 1400 °F to abate the odor problem coming from the five (5) asphalt storage tanks, or at an operating temperature determined from a stack test that will achieve an odor that is tolerable. Stack test will be required if and when a complaint regarding odor has been received by the applicant or the OAM/NWO inspector.

Note: The five (5) asphalt storage tanks have insignificant VOC emissions. The company has installed a 1.0 mmBtu/hr oxidizer to abate the odor problem coming from these storage tanks.

- (k) 326 IAC 2-3: Emission Offset Rules
Based on the permit (45-05-89-0451) issued on September 12, 1985 to Globe Building Materials, its potential VOC emissions after control are at levels greater than 25 tons per year. Therefore, the source is an existing major source under 326 IAC 2-3, Emission Offset Rules.

The source has requested a limit in the sourcewide VOC emissions below 25 tons per year to avoid 326 IAC 2-7, Part 70 Permit Program, and be a minor source under 326 IAC 2-3. See detailed calculation on page 7 of this TSD.

Compliance Monitoring

1. The asphalt saturators/coaters 1 and 2 have applicable compliance monitoring conditions as specified below:
 - (A) The asphalt shingles production will have a limit of 453,000 tons/year asphalt roof shingles and rolls. This is a combined limit for the saturators/coaters 1, and 2, to restrict the VOC emissions to less than 25 tons per year.
 - (B) Quarterly reports shall be submitted to OAM. These reports shall include the amount of asphalt shingles in tons per twelve month period, rolled on a monthly basis.

- (C) That operating parameters of the two (2) Electrostatic Precipitators (ESP), CE1 and CE2 from the two asphalt saturators/coaters 1 and 2 shall be maintained at levels established in the stack test that will demonstrate compliance, and shall be monitored and recorded daily.

The production limitation and parameters monitoring conditions are necessary to ensure compliance with 326 IAC 6-1 (PM & PM10 Emission Requirements) and 326 IAC 2-8 (FESOP).

Conclusion

The operation of this asphalt roofing manufacturing plant will be subject to the conditions of the attached proposed **NSR/FESOP No. F 089-12500-00012**.

Indiana Department of Environmental Management Office of Air Management

Addendum to the
Technical Support Document for a New Source Review and a Federally Enforceable
State Operating Permit (FESOP)

**Globe Building Materials
2207 Schrage Avenue
Whiting, Indiana 46394**

NSR/FESOP 089-12500-00012

On October 3, 2000 the Office of Air Management (OAM) had a notice published in The Post Tribune, Merrillville, Indiana and in The Times, Munster, Indiana, stating that Globe Building Materials had applied for a New Source Review (NSR) and a Federally Enforceable State Operating Permit (FESOP) to operate an asphalt roof shingles manufacturing plant with Electrostatic Precipitator (ESP) to control the particulate matter (PM) emissions. The notice also stated that OAM proposed to issue a permit for this operation and provided information on how the public could review the proposed permit and other documentation. Finally, the notice informed interested parties that there was a period of thirty (30) days to provide comments on whether or not this permit should be issued as proposed.

On November 2, 2000, Globe Building Materials, Inc. submitted comments on the proposed FESOP. The summary of the comments is as follows (changes are bolded and deletions are struck-through for emphasis):

Comment 1: As part of the production line #2 modification, one (1) 1.5 mmBtu/hr, on hot oil heater will be added.

Comment 2: Six (6) 1.0 mmBtu/hr tube heaters for storage tanks which were missed previously should be added in the FESOP under the insignificant activities.

Response 1 & 2: The insignificant activity section in the FESOP was revised to include the facilities you mentioned and numbered as follows:

- (14) One (1) 1.5 mmBtu/hr, on hot oil heater for the modification to production line #2;
and
- (15) Six (6) 1.0 mmBtu/hr tube heaters for storage tanks.

Upon further review, the OAM has decided to make the following revisions to the permit (changes are bolded and deletions are struck-through for emphasis):

- (1) Condition B.1 Permit No Defense in the proposed permit was deleted in the final permit. Subsequent conditions were re-numbered accordingly.
- (2) Condition B.14, Emergency Provisions, now B.13 was revised as follows:

B.1-4 3 Emergency Provisions [326 IAC 2-8-12]

-
- (a) An emergency, as defined in 326 IAC 2-7-1(12), is not an affirmative defense for an action brought for noncompliance with a federal or state health-based emission limitation, except as provided in 326 IAC 2-8-12.
 - (b) An emergency, as defined in 326 IAC 2-7-1(12), constitutes an affirmative defense to an action brought for noncompliance with a health-based or technology-based emission limitation if the affirmative defense of an emergency is demonstrated through properly signed, contemporaneous operating logs or other relevant evidence that describe the following:

- (1) An emergency occurred and the Permittee can, to the extent possible, identify the causes of the emergency;
- (2) The permitted facility was at the time being properly operated;
- (3) During the period of an emergency, the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or other requirements in this permit;
- (4) For each emergency lasting one (1) hour or more, the Permittee notified IDEM, OAM, within four (4) daytime business hours after the beginning of the emergency, or after the emergency was discovered or reasonably should have been discovered;

Telephone Number: 1-800-451-6027 (ask for Office of Air Management, Compliance Section), or
Telephone Number: 317-233-5674 (ask for Compliance Section)
Facsimile Number: 317-233-5967

Failure to notify IDEM, OAM, by telephone or facsimile within four (4) daytime business hours after the beginning of the emergency, or after the emergency is discovered or reasonably should have been discovered, shall constitute a violation of 326 IAC 2-8 and any other applicable rules. [326 IAC 2-8-12(f)]

- (5) For each emergency lasting one (1) hour or more, the Permittee submitted **notice the attached Emergency Occurrence Report Form or its equivalent**, either ~~in writing~~ **by mail** or facsimile, ~~of the emergency~~ to:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Management
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

within two (2) working days of the time when emission limitations were exceeded due to the emergency.

The notice fulfills the requirement of 326 IAC 2-8-4(3)(C)(ii) and must contain the following:

- (A) A description of the emergency;
- (B) Any steps taken to mitigate the emissions; and
- (C) Corrective actions taken.

The notification which shall be submitted by the Permittee does not require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (6) The Permittee immediately took all reasonable steps to correct the emergency.
- (c) In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.
 - (d) This emergency provision supersedes 326 IAC 1-6 (Malfunctions) for sources subject to this rule after the effective date of this rule. This permit condition is in addition to any emergency or upset provision contained in any applicable requirement.

- (e) IDEM, OAM, may require that the Preventive Maintenance Plans required under 326 IAC 2-8-3-(c)(6) be revised in response to an emergency.
- (f) Failure to notify IDEM, OAM, by telephone or facsimile of an emergency lasting more than one (1) hour in ~~compliance~~ **accordance** with (b)(4) and (5) of this condition shall constitute a violation of 326 IAC 2-8 and any other applicable rules.
- (g) Operations may continue during an emergency only if the following conditions are met:
 - (1) If the emergency situation causes a deviation from a technology-based limit, the Permittee may continue to operate the affected emitting facilities during the emergency provided the Permittee immediately takes all reasonable steps to correct the emergency and minimize emissions.
 - (2) If an emergency situation causes a deviation from a health-based limit, the Permittee may not continue to operate the affected emissions facilities unless:
 - (A) The Permittee immediately takes all reasonable steps to correct the emergency situation and to minimize emissions; and
 - (B) Continued operation of the facilities is necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw materials of substantial economic value.

Any operation shall continue no longer than the minimum time required to prevent the situations identified in (g)(2)(B) of this condition.

B.15 14 Deviations from Permit Requirements and Conditions [326 IAC 2-8-5(4)(3)(C)(ii)]

- (a) Deviations from any permit requirements (for emergencies see Section B - Emergency Provision), the probable cause of such deviations, and any response steps or preventive measures taken shall be reported to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Management
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

~~within ten (10) calendar days from the date of the discovery of the deviation~~
using the attached Quarterly Deviation and Compliance Monitoring Report, or its equivalent. Deviations that are required to be reported by an applicable requirement shall be reported according to the schedule stated in the applicable requirement and do not need to be included in this report.

The notification by the Permittee does require the certification by the “authorized individual” as defined by 326 IAC 2-1.1-1(1).

- (b) A deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit or a rule. It does not include:
 - (1) An excursion from compliance monitoring parameters as identified in Section D of this permit unless tied to an applicable rule or limit; or
 - ~~(2) An emergency as defined in 326 IAC 2-7-1(12); or~~
 - ~~(3) 2~~ Failure to implement elements of the Preventive Maintenance Plan unless such failure has caused or contributed to a deviation.

- ~~(4) Failure to make or record information required by the compliance monitoring provisions of Section D unless such failure exceeds 5% of the required data in any calendar quarter.~~

A Permittee's failure to take the appropriate response step when an excursion of a compliance monitoring parameter has occurred is a deviation.

- ~~(c) Written notification shall be submitted on the attached Emergency/Deviation Occurrence Reporting Form or its substantial equivalent. The notification does not need to be certified by the "responsible official" as defined by 326 IAC 2-7-1(34).~~

- (c) **Emergencies shall be included in the Quarterly Deviation and Compliance Monitoring Report.**

- ~~(d) Proper notice submittal under 326 IAC 2-7-16 satisfies the requirement of this subsection.~~

- (3) Condition C.18 General Reporting Requirements was revised as follows:

C.18 General Reporting Requirements [326 IAC 2-8-4(3)(C)] [326 IAC 2-1.1-11]

- (a) ~~To affirm that the source has met all the compliance monitoring requirements stated in this permit the source shall submit a Semi-Annual Compliance Monitoring Report. Any deviation from the requirements and the date(s) of each deviation must be reported.~~
The source shall submit the attached Quarterly Deviation and Compliance Monitoring Report or its equivalent. Any deviation from permit requirements, the date(s) of each deviation, the cause of the deviation, and the response steps taken must be reported. This report shall be submitted within thirty (30) days of the end of the reporting period.

The **Quarterly Deviation and Compliance Monitoring Report** shall include the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (b) The report required in (a) of this condition and reports required by conditions in Section D of this permit shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Management
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

- (c) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAM, on or before the date it is due.
- (d) Unless otherwise specified in this permit, any quarterly report shall be submitted within thirty (30) days of the end of the reporting period. The reports do require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- ~~(e) All instances of deviations as described in Section B- Deviations from Permit Requirements Conditions must be clearly identified in such reports. The Emergency/Deviation Occurrence Report does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).~~

- ~~(f) Any corrective actions or response steps taken as a result of each deviation must be~~

~~clearly identified in such reports.~~

- (g e) The first report shall cover the period commencing on the date of issuance of this permit and ending on the last day of the reporting period. **Reporting periods are based on calendar years.**
- (4) On Section A.1, in the County Status Section, PM10 was added in the list as Moderate Nonattainment.
- (5) Section A.2 in the draft permit was revised to correct some typographical errors and to reflect that the production line #1 PM emissions are controlled by two ESPs (CE1 and CE2). Revision is as follows:
- (a) Production line #1, which is currently used to produce asphalt roof shingle, consists of a saturator/coater #1 with a maximum capacity of 61.39 tons of roof shingles per hour. Particulate Matter (PM) emissions from this line are controlled by **two** Electrostatic Precipitators CE1 **and CE2**;
 - (b) Modification to production line #2, which is currently used to produce asphalt roof rolls, consists of a saturator/coater #2. This line is capable of producing a maximum of 11.69 tons of asphalt roof rolls per hour. The modification will give this line a capability to alternately produce laminated shingles at a maximum rate of 47.28 tons per hour. Particulate Matter (PM) emissions from this line are controlled by **two** Electrostatic Precipitators **CE1 and CE2**.
 - (c) no changes
 - (d) A limestone unloading, storage, heating and handling **system**, which has a maximum capacity of 60,847 tons per year, and is controlled by three (3) baghouses, CE3, CE4, and CE5;
 - (e) Talc and silica sand handling and recovery, which has a maximum capacity of 20,000 tons per year **of talc and silica sand combined**, and is controlled by two (2) dust collectors DC1 and DC2; and
- (6) The continuous monitoring and recording of the gas temperature at the inlet of the ESP required by the NSPS that is mentioned on page 10 of 16 in the Technical Support Document, was inadvertently not carried over in the FESOP. Hence, the FESOP was revised and the following Condition (e) was added in Condition D.1.11.

D.1.11 Electrostatic Precipitators (ESPs)

The two (2) electrostatic precipitators (ESPs) CE1 and CE2 shall be operated at all times when the two (2) saturators/coaters 1 and 2 are in operation.

- (a) The ability of the ESPs to control particulate emissions shall be monitored once per shift, when the saturators/coaters are in operation, by measuring and recording the number of T-R sets (transformer-rectifier sets) in service.
- (b) Appropriate response steps shall be taken in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps whenever the percentage of T-R sets in service falls below 90 percent*. In the event of the T-R failure resulting in less than 90 percent* availability, so that T-R sets can be repaired or the cause leading to T-R sets outages can be corrected.
- (c) Available T-R sets shall be operated at voltage and current levels consistent with the ESP manufacturer's specification.

- (d) The instrument used for determining the T-R set voltage shall be subject to approval by IDEM, OAM, and shall be calibrated at least once every six (6) months.
- (e) **The owner or operator shall continuously monitor and record the temperature of the gas at the inlet of the ESPs, CE1 and CE2. The temperature monitoring instrument shall have an accuracy of $\pm 15^{\circ}\text{C}$ over its range.**

*(Other values may be used if it can be demonstrated that a lesser number of T-R sets is needed to maintain compliance, but T-R set availability should, in no case, fall below 75 percent. Response Steps planned to restore T-R sets to service are to be included in the Preventive Maintenance Plan.)

- (7) The temperature level to be monitored in Condition D.1.11(e) will be established during the stack testing. Hence, Condition D.1.9 was revised as follows:

D.1.9 Compliance Stack Test [40CFR Part 60.470] [326 IAC 12]

- (a) Compliance stack tests shall be performed for PM, and PM10 from the saturator/coater 1 and saturator/coater 2 Electrostatic Precipitator (ESP), identified as CE1 and CE2, to verify compliance with Conditions D.1.2, D.1.3, and D.1.4. **During these tests the temperature of the gas at the inlet of the ESPs, CE1 and CE2 shall be established that coincides with the limits in Conditions D.1.2, D.1.3, and D.1.4.**

When the product being produced in saturator/coater 2 is not the product subject to the NSPS (40CFR Part 60.470, Subpart UU), the tests shall be conducted within 60 days after achieving maximum production rate on the modification, but no later than 180 days after initial start-up,

- (8) The Visible Emission Notations shall be once per shift, instead daily as stated in the proposed permit.

D.1.12 ~~Daily~~ Visible Emission Notations

- (a) ~~Daily~~ Visible emission notations of the saturators/coaters Electrostatic Precipitators stack exhausts CE1 and CE2, limestone unloading, storage heating and handling stack exhausts CE3, CE4, CE5, talc and silica sand handling stack exhausts DC1, DC2, shall be performed **once per shift** during normal daylight operations **when exhausting to the atmosphere**. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed.

Appendix A: Emissions Calculations
Natural Gas Combustion Only
MM BTU/HR <100
Small Industrial Boiler

Company Name: Globe Building Materials, Inc.
Address City: 2207 Schrage Avenue, Whiting, Indiana 46394
FESOP/NSR: 089-12500-00012
Reviewer: Aida De Guzman
Date Application: July 19, 2000

Kewanee boiler

Heat Input Capacity
MMBtu/hr

Potential Throughput
MMCF/yr

10.5

91.6

Pollutant						
Emission Factor in lb/MMCF	PM* 1.9	PM10* 7.6	SO2 0.6	NOx 100.0 **see below	VOC 5.5	CO 84.0
Potential Emission in tons/yr	0.1	0.3	0.0	4.6	0.3	3.8

*PM emission factor is filterable PM only. PM10 emission factor is filterable and condensable PM10 combined.

**Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 32

Methodology

All emission factors are based on normal firing.

MMBtu = 1,000,000 Btu

MMCF = 1,000,000 Cubic Feet of Gas

Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu

Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03 (SUPPLEMENT D 3/98)

Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton
above
emission

Appendix A: Emissions Calculations
Natural Gas Combustion Only
MM BTU/HR <100
Small Industrial Boiler

insignificant activities
various heaters

Company Name: Globe Building Materials, Inc.
Address City: 2207 Schrage Avenue, Whiting, Indiana 46394
FESOP/NSR: 089-12500-00012
Reviewer: Aida De Guzman
Date Applied: July 19, 2000

Heat Input Capacity
MMBtu/hr

Potential Throughput
MMCF/yr

27.8

243.5

Pollutant						
Emission Factor in lb/MMCF	PM* 1.9	PM10* 7.6	SO2 0.6	NOx 100.0 **see below	VOC 5.5	CO 84.0
Potential Emission in tons/yr	0.2	0.9	0.1	12.2	0.7	10.2

*PM emission factor is filterable PM only. PM10 emission factor is filterable and condensable PM10 combined.

**Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 32

Methodology

All emission factors are based on normal firing.

MMBtu = 1,000,000 Btu

MMCF = 1,000,000 Cubic Feet of Gas

Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu

Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03 (SUPPLEMENT D 3/98)

Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton
above
emission